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samt underhåll av tavla**



# System 7

## Användarhandbok

[www.sius.se](http://www.sius.se)

## Användarhandledning för kontrollenheten CU941

Följande användarhandledning beskriver kontrollenhetens funktioner för en 80 m löpande älgbana, 50 m löpande viltbana och inskjutningsbana.

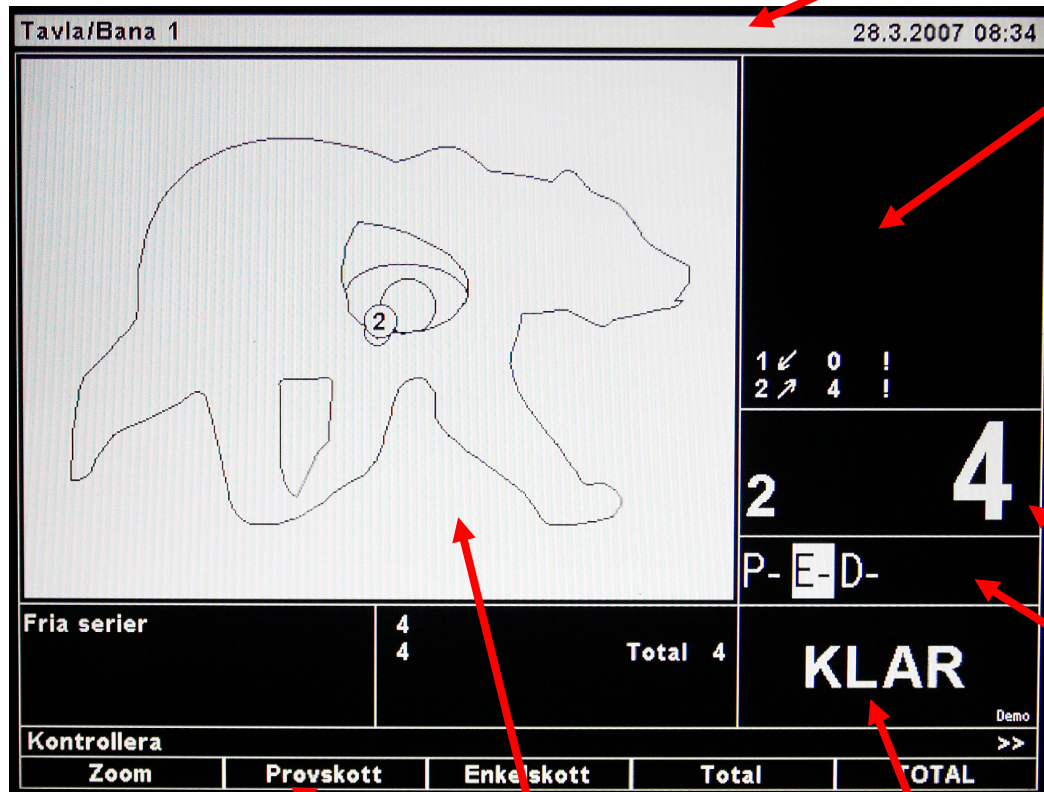
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## 1. Bildskärmslayout

Information om pågående skjutning visas i olika fält på bildskärmen.

Rubriklist



Listfönster

Skottfönster

Program-  
förlöpps  
fönster

Funktionstangentfönster

Tavelfönster

Statusfönster

I ovanstående exempel har valts layouten "Klassisk". Vid leverans är layouten inställd på "Final". Tavelfönstret är i detta fall större och inkluderar de båda nedre rutorna. Vid träffbildsskytte kan det vara en fördel att använda "Klassisk" layout i och med att informationen om

### 1.1. Tavelfönster

Med funktionstangenten Zoom kan olika förstöringssteg väljas. Eller med handkontrollens Zoom knapp. Visningsskalan ändras då i motsvarande grad i tavelfönstret. Symbolen för det senast avfyrate skottet kan ställas in oberoende av symbolen för de övriga skotten. Som fabriksinställning har för båda symbolen "Cirkel" valts. Kontrollenheten visas då skotthålen i överdriven storlek.

Informationen "Skala" medger en bedömning av tavelstorleken. Därigenom kan en uppfattning fås om avståndet mellan skott och avståndet skott till tavelcentrum. Visningen av kaliber ((tolken storlek) och skala kan urkopplas via inställningarna. Detta är gjort som fabriksinställning för jakt.

För inskjutningstavlan bibehålls dock kaliber informationen. Man får då en linjal som ger en bra uppfattning om storleken.

När bomskottsensorn är inkopplad visas i nedre högra hörnet denna symbol.



När nedanstående korslagda markörspadar visas har något inträffat vid skjutplatsen. Bomskottsensorn har icke registrerat att ett skott avfyrats:



## 1.2. Skottfönster



I detta fall visas ett fönster från älgen. Skott nr 2 har tagit i ring 5 och siffran ett till höger talar om att skottet är innanför det anatomiska träffområdet på älgen. En 0 anger att träffen tagit utanför det anatomiska träffområdet.

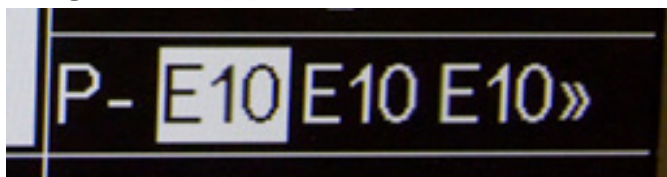
Vid vildsvinsskytte bl.a. samt skytte mot inskjutningstavlan visas ett P efter tvåan vilket anger att skottet är ett provskott.

## 1.3. Listfönster



Siffran till vänster anger skottnumret. Pilen visas träffläge sett från tavlans mitt. Därefter följer valören. Flaggan till höger om siffran 5 betyder att en träff i innerfemman föreligger. I utskriften på skrivaren framställs innerfemman som ”\*”. Därefter följer träff inom det anatomiska träffområdet som visas som 1. En 0 anger träff utanför det anatomiska träffområdet.

## 1.4. Programförloppsfönster



Programförloppsfönster kan bara ses om det valts in, och det kan urkopplas via inställningarna. I fabriksinställningen visas detta fönster.

Programförloppsfönstrets innehåll beror på det inställda programmet. I ovanstående figur visas ett "Fast Program" för vildsvinsskytte, där antalet skott är fast fördefinierat. Den aktiva gruppen visas mot vit bakgrund. Symbolen ">>" anger att det efter gruppen "E10" följer ytterligare grupper. På liknande sätt sker visning vid användarprogram och vid en Match.

Vid 'fria serier' visas endast de tre avfyringsvarianterna P- (provskott), E- (enkelskott) och D- (dold skottserie). Det går att välja fritt mellan avfyringsvarianterna och antalet skott är inte fördefinierat.

## 1.5. Statusfönster



Det förekommer ett antal viktiga statusinformationer:

| Status  | Beskrivning                                                                                                                                                                                                                                                                                                   |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| „KLAR“  | På systemet har ett program ställts in. Tavlan har detekterats och är likaså driftklar. Skjutningen kan starta. Efter en systemstart bör man vänta minst en minut innan första skottet avfyras. Manöverenheterna behöver denna tid för att alla anslutna systemkomponenterna skall synkroniseras fullständig. |
| „STOPP“ | Manöverenheten har startats på nytt eller det senaste programmet har avslutats. Avfyring är ännu inte eller inte tillåten. Skott under stopp-fasen är ogiltiga.                                                                                                                                               |

| Status      | Beskrivning                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| „VISA“      | En serie med flera skott har avfyrats. Skotten visas nu efter varandra. Under visnings-fasen är ingen avfyring tillåten. Skott som avfyras under visnings-fasen är ogiltiga.                                                                                                                                                                                                                                     |
| „OFFLINE“   | Manöverenheten växlar till "OFFLINE" när ingen tavla med rätt tavelnummer (subnetä-adress) har detekterats. Antingen är tavlan inte korrekt ansluten eller fel tavelnummer har programmerats in. Hur LON-mätelektroniken kan omprogrammeras till rätt tavelnummer förklaras i avsn. 2.2 "Anslutning av tavlan" och i "Bilaga till driftsinstruktion för System 7" under " <b>System\Hårdvara\Figur\Anslut</b> ". |
| „PAUSE“     | I ISSF-program växlar systemet efter varje ställning till "PAUS". Skytten kan koppla sig vidare med RC92 (Match-box) eller via tangentbordet för att byta ställning.                                                                                                                                                                                                                                             |
| „ÅTERSKAPA“ | Efter ett strömavbrott startar manöverenheten automatiskt på nytt. Om det senast genomförda programmet inte avslutats korrekt kommer det ännu öppnade programmet att återställas. Tävlingen kan fortsättas från den punkt där avbrottet skedde.                                                                                                                                                                  |

Med mindre text visas dessutom ytterligare statusinformation:

| Status | Beskrivning                                                                                                                                                                                                              |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| „DEMO“ | Manöverenheten befinner sig i en demonstrationsmod. Med Ins-tangenten kan LON-mätrelektroniken fås att avge demo-avfiringar. Demo-avfiringar markeras med ett utropstecken "!" såväl på Manöverenheten som i utskriften. |

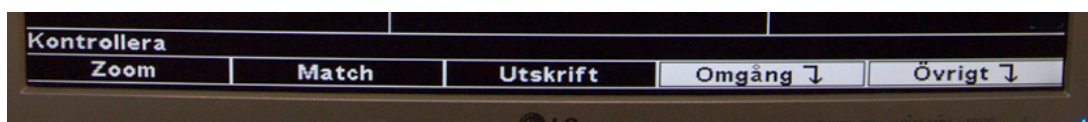
## 1.6. Rubriklist

|               |                 |
|---------------|-----------------|
| Tavla/Bana 57 | 26.1.2004 14:52 |
|---------------|-----------------|

I rubriklisten visas tavelnumret samt aktuellt datum och klockslag. Formatet för datumvisning kan ändras.

## 1.7. Funktionstangentfönster

Funktionstangenterna F1 till F5 har olika funktioner. Beroende på i vilken mod Kontrollenheten arbetar kan funktionstangenterna tilldelas olika funktioner.



I funktionstangentfönstret visas samma information som på den lilla LCD-displayen på kontrollenhetens tangentbord. Men LCD-displayen är för varje funktionstangent begränsad till fyra tecken (se listan över förkortningar i "Bilaga till driftsinstruktion för System 7"). Hur navigering kan ske i menyträdet beskrivs i avsnitt "Manövrering".

# 2. Manövrering

## 2.1. Manöversätt

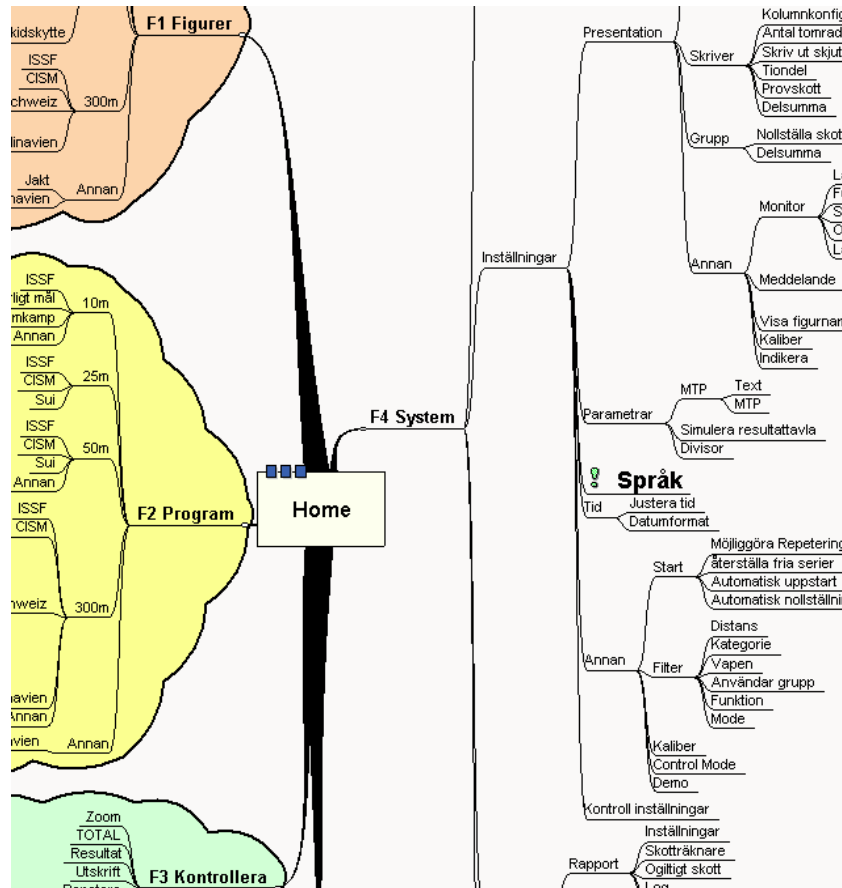
Kontrollenheten kan användas på olika sätt. Manövrering via tangentbordet (meny) är den gynnsammaste varianten. Samtliga funktioner som är tillgängliga hos Kontrollenheten kan styras via tangentbordet. Undantagna från detta är endast användarprogrammen. Dessa kan enbart laddas via en streckodsläsare eller från en central dator.

Den stora fördelen med manövrering via streckoder är att de viktigaste instruktionerna kan sammanställas på ett pappersark, varigenom manövreringen kan reduceras till det nödvändigaste.

Manövrering med fjärrkontrollen är ytterligare ett sätt för att enkelt föra in en ny skytt och starta om skjutprogrammet.

## 2.2. Meny (manövrering via tangentbord)

Menyn är strukturerad som ett träd. På liknande sätt som hos moderna datorsystem är de befintliga elementen indelade i kataloger, mappar och filer (instruktioner). Trädets rot är i översikten placerad i mitten. Från roten förgrenar sig katalogerna och mapparna. Ju mera katalogerna och mapparna är förgrenade desto mera detaljerade är informationen och instruktionerna.



Trädets kompletta struktur visas överskådligt i "Bilaga till driftsinstruktion för System 7". Dessutom motsvarar denna struktur samtidigt innehållsförteckningen för strekkodsbeskrivningarna. För navigering inom trädets används följande tangenter och funktionstangenter:

| <b>Tangent</b>  | <b>Namn</b>      | <b>Beskrivning</b>                                                                                                                                                       |
|-----------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>F1 .. F5</i> | Funktionstangent | Med funktionstangenterna kan en förgrening inom trädets företas eller en instruktion utföras.                                                                            |
| <i>Home</i>     | Home             | Home-tangenten används för direkt återgång till rotkatalogen. Därefter kan man med Home-tangenten växla fram och tillbaka mellan rotkatalogen och kontrollförteckningen. |
| <i>Esc</i>      | Escape           | Med Esc-tangenten kan man gå ur en mapp och gå en nivå tillbaka mot roten.                                                                                               |

| <b>Tangent</b>     | <b>Namn</b>     | <b>Beskrivning</b>                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Opt</i>         | Option          | Med Opt-tangenten kan man använda de senast hämtade instruktionerna. På detta sätt kan man snabbt komma åt ofta använda instruktioner. Vid förnyad tryckning på Opt-tangenten sker återgång till föregående meny. Genom att trycka på Home-tangenten återgår systemet till rotkatalogen.                                                                               |
| <i>Help</i>        | Hjälp           | Help-tangenten används för att visa och skriva ut adress och telefonnummer till Sius AG samt information om versionen av programvara och hårdvarukomponenterna. Ha denna information tillgänglig vid kontakt med serviceavdelningen hos Sius AG.                                                                                                                       |
| <i>Next Window</i> | Nästa fönster   | Om ett fönster (en förteckning) omfattar fler än fem instruktioner visas symbolen ">>" på bildskärmen och i menyn. Instruktionerna sex och uppåt fås då fram med knappen Next window. Genom förnyad tryckning på Next window sker återgång till första menyfönstret.                                                                                                   |
| <i>Enter</i>       | Inmatning       | Vissa inställningar kan redigeras med hjälp av sifvertangenter i tangentbordet. T.ex. kan skyttumret matas in via sifvertangentbordet. Dessa inmatningar måste bekräftas med Enter-tangenten eller avbrytas med Esc-tangenten                                                                                                                                          |
| <i>Up</i>          | Uppåt           | Med Up-tangenten kan i ett avfyrat program det nästsista skottet i tavelfönstret på nytt markeras. Därigenom kan alla tidigare skott diskuteras                                                                                                                                                                                                                        |
| <i>Down</i>        | Nedåt           | Med Down-tangenten kan diskussionen ske i motsatt riktning.                                                                                                                                                                                                                                                                                                            |
| <i>Ins</i>         | Infoga (Insert) | Om systemet befinner sig i Demo-status (Demo visas i statusfönstret nedtill höger med litet typsnitt) kan man med Ins-tangenten avropa demoskott från tavlan. Detta medger en kontroll av anläggningent utan att riktiga skott behöver avfyras. Demoskott markeras såväl i listfönstret som i utskriften alltid med ett "!" så att de kan skiljas från verkliga skott. |

När ett skjutprogram väljs växlar menyn automatiskt till kontrollmenyn.

I kontrollmenyn finns direkt de viktigaste instruktionerna tillgängliga vid den valda programtypen. Se avsnitt "Programstyrning".

### 2.3. Streckkoder

Vid inläsning av en streckkod skall streckkodsläsaren placeras direkt och ca 1-2 cm rakt ovanför den aktuella streckkoden. Därefter trycks inläsningsknappen in.

För en fungerande manövrering av systemet måste streckkoderna föreligga som högvärdiga utskrifter eller kopior.

Streckkodsläsaren kvitterar inlästa streckkoder genom olika "beep"-signaler. Ett "beep" betyder godkänd inläsning av streckkoden, två "beep" innebär att

instruktionen visserligen har blivit korrekt inläst men att den inte stöds av systemet eller att den för tillfället inte kan utföras. Vid tre 'beep' föreligger ett inläsningsfel eller en ogiltig streckkod.

Tillåtna streckkoder är endast de som är listade i "Bilaga till driftsinstruktion för System 7" eller sådana som framställts med hjälp av Barcode-biblioteket. Andra streckkoder kan leda till funktionsfel hos enheten.

Kontrollenheten (endast CU941) har på höger sida ett hårdvarugränssnitt (kontaktdon) till vilket en streckkodsläsare kan anslutas. Med denna streckkodsläsare kan alla inmatningar göras som också kan göras via tangentbordet. Därutöver kan även användarprogram läsas in som tidigare framställts med datorprogrammet Barcode-Library (Gratisprogram hämtas från hemsidan [www.sius.com](http://www.sius.com)) eller med SIUSDATA®.

Streckkoderna är organiserade på samma sätt som Kontrollenhetens tangentbord. I "Bilaga till driftsinstruktion för System 7" är samtliga tillgängliga streckkoder listade. Menyträdet kan därvid användas som en kompletterande innehållsförteckning.

Som streckkoder används "Interleave 2 of 5"-koder. Koderna är skyddade med en kontrollsiffra. Därigenom filtreras läsfel och felaktiga koder.

## **2.4. PC**

Med mjukvaran SIUSDATA® kan alla instruktioner sändas samtidigt till samtliga kontrollenheter som är anslutna till samma nätverk. Med denna funktion är det enkelt att hos alla kontrollenheter samtidigt ändra samma inställningar eller ladda ett program. Tillvägagångssättet beskrivs i dokumentationen för SIUSDATA®.

## **3. Inställningar**

Kontrollenheten erbjuder ett stort antal inställningsmöjligheter. Praktiskt taget alla kundbehov kan täckas med dessa inställningar. Från språket via ett uppstartningsprogram till diverse presentationsvarianter kan allt programmeras. Hur inställningarna är organiserade framgår mest överskådligt i menyträdet.

Vid leverans har vi föreslagit en kundinställning. Dessa inställningar kan användaren ändra.

Filter är en funktion för att dölja inställningar som inte används.

## **4. Skjutprogram**

De program som kan lagras i kontrollenheten kan indelas i fyra grupper:

| <b>Programtyp</b> | <b>Beskrivning</b>                                                                                                                                                                    |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fri Serie         | På varje tavelbild kan en Fri Serie avfyras.                                                                                                                                          |
| Fasta Program     | Ofta använda skjutprogram är lagrade som Fasta Program.                                                                                                                               |
| Användarprogram   | För varje tavelbild kan man med hjälp av SIUS Barcode-biblioteket programmera egna förlopp. Emellertid kan dessa användaprogram endast laddas med en streckodsläsare eller via en PC. |
| Match             | De officiella ISSF-Matcherna följer ytterligare regler.                                                                                                                               |

## 5. Kontrollera menyn

| <b>Instruktion</b> | <b>Funktion</b>                                                                                                                                           |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| „\Zoom“            | Tavelgrafikens sektor förstoras.                                                                                                                          |
| „\Utskrift“        | Om en skrivare med grafikfunktion är ansluten (termoskrivare D931) till systemet kan innehållet i den aktuella Manöverenhetsbilden skrivas ut som grafik. |
| „\Repetera“        | „Wiederholen“ visas först när programmet stoppats. Med <b>„Kontrollera\Repetera“</b> kan det tidigare valda programmet skjutas en gång till.              |

| <b>Instruktion</b>        | <b>Funktion</b>                                                                                                                                                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| „\Annan\Avbryt“           | Ett pågående program kan stoppas med <b>„Kontrollera\Annan\Avbryt“</b> . Programmet betraktas som avslutat och resterande del av programmet kan inte köras till slut. Ett avbrott sker också om under pågående program ett nytt program läses in. |
| „\Annan\Införa skott '0'“ | Vid anläggningar utan avfyringsdetektor kan det vara meningsfullt och nödvändigt att ett skott som fullständigt missar målet manuellt registreras som noll.                                                                                       |
| „\Annan\Radera tavlan“    | Visningen av samtliga skot som presenteras i tavelfönstret raderas. Själva skotten förblir emellertid lagrade i systemet och har fortsatt inverkan på skjutresultatet.                                                                            |
| „\Annan\Radera lista“     | Med denna instruktion kan listfönstret raderas manuellt. Tidigare utskrivna uppgifter behåller sin giltighet.                                                                                                                                     |

## 6. Tavor (fria serier)

I en Fri Serie är antalet skott som skall skjutas inte fastlagt i förväg. Skytten kan själv avsluta skjutningen genom grupptotal eller stotal. På så sätt kan valfria program skjutas. Något fast föreskrivet förlopp för detta kan emellertid inte fås via Kontrollenheten. Detta funktionssätt är därför speciellt lämpligt för vana användare som är väl förtrogna med de program som skall skjutas. Efter att en Fri Serie ställts in visas följande i programförloppsfönstret:

**P-E-D-**

De tre bokstäverna betecknar de tre skjutarterna som finns tillgängliga. Vid "P-" kan provskott avfyras. Valörerna för provskotten adderas inte till den sammanlagda totalen. Genom att trycka på funktionsknappen "\Enkelskott" kan växling till "E-" ske. Enkelskott visas direkt efter varje enskilt skott. I motsats härtill visas serieskott under "D-" först efter att en seriegrupp avslutats eller efter att uttryckligen instruktionen "Visa" utförts. Bindestrecket "-" betyder att det är fråga om en öppen grupp. Antalet skott som kan skjutas är valfritt. Vid en Fri Serie kan följande instruktioner utföras.

| <i>Instruktion</i> | <i>Funktion</i>                                                                                                                                             |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>„\Match“</b>    | Med Match-knappen på fjärrkontrollen (RC921) kan växling ske från "Prov" till "Enkelskott" och från "Enkelskott" till "Dold" och åter tillbaka till "Prov". |

| <i>Instruktion</i>               | <i>Funktion</i>                                                                                                                                                                                                                                                |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>„\Enkelskott“</b>             | Med " <b>\Enkelskott</b> " kan en enskottsgrupp startas. Detta gäller även om en enskottsgrupp redan har skjutits. Den föregående gruppen totaliseras och en ny grupp öppnas. På detta sätt kan till exempel en Match med 60 skott delas upp i sex 10-grupper. |
| <b>„\Total“<br/>(Serietotal)</b> | En Serietotal totaliserar alla skott sedan senaste serietotal eller sedan programbörjan. Därigenom kan flera enskotts- och/eller seriegrupper sammanläggas.                                                                                                    |
| <b>„\TOTAL“<br/>(Matchtotal)</b> | Matchtotal totaliserar alla skott i programmet och avslutar det pågående programmet. Statusfönstret växlar till "STOPP".                                                                                                                                       |
| <b>„\Dolda skott“</b>            | Med " <b>\Dolda skott</b> " kan en ny seriegrupp startas. Om detta innebär att en pågående seriegrupp stoppas, visas denna automatiskt innan skjutningen kan fortsätta.                                                                                        |
| <b>„\Visa“</b>                   | Med " <b>\Visa</b> " kan ännu inte visade skott ur en seriegrupp hämtas ur minnet. Därvid sker ingen automatisk avslutning av seriegruppen.                                                                                                                    |

## 7. Fasta Program

Fasta Program är lagrade i Kontrollenhetens icke flyktiga minne. Ett Fast Program ger en fast ordningsföljd för skottgrupperna. Kontrollenheten garanterar att det bestämda förloppet följs. Fasta Program är exempelvis programmet för löpande älg med två skott per lopp och två lopp per serie. Programförlopps-fönstret hos detta Fasta Program har följande utseende:

**P- E5 P- E5 D2 D3 D5**

Ett nytt Fasta Program kräver en ny programversion hos kontrollenheten.

## 8. Användarprogram

Användarprogram kan skapas med PC-mjukvaran Barcode-Library eller i SIUS DATA®. Med sådana program kan egna programförlopp definieras. Det är också möjligt att sammanställa ett användarprogram där tavelbilden växlar under programmets utförande. Det är emellertid inte möjligt att samtidigt ändra andra inställningar med streckkoden för användarprogrammet. När det för ett program till exempel krävs en viss utskrift måste denna ställas in separat. Inställning av användarprogram kan ske via streckkoder eller en PC. Likaså är det inte möjligt att konfigurera användarprogram med hjälp av tangentbordet. I övrigt fungerar användarprogram identiskt lika som Fasta Program.

## 9. Match

Skytten kan individuellt växla från provskott till tävlingsskott. Detta kan ske ex. via fjärrkontrollen genom att trycka på knappen Match. Så länge inget tävlingsskott avfyrats kan skytten återgå till provskott.

## 10. Kommunikation

De olika systemkomponenterna (Kontrollenhet, LON-mätelektronik (tavlan), och PC) är sammanlänkade via en fältbuss LON. Genom detta kommunikationsnät kan systemkomponenterna kommunicera med varandra. LON-mätelektroniken överför skottrådata till kontrollenheten så att kontrollenheten kan beräkna skottvalören och infoga denna korrekt i det pågående programmet. Detta är den viktigaste förbindelsen. Utan kommunikation från kontrollenheten till LON-mätelektroniken kan ingen skjutverksamhet startas. Ett avbrott i förbindelsen med LON-mätelektroniken signaleras av kontrollenheten genom indikeringen "OFFLINE" i statusfönstret.

Kontrollenheten ger förutom skottinformationen även annan information till PC:n, för att där data från alla banor kan sammanfattas och utvärderas. För att förhindra en överbelastning av nätverket indelas det vid installation av större anläggningar med flera banor i olika segment. Kraven på kablering och användning av routers beskrivs i hårdvaruinstruktionen.

För felfri funktion krävs att systemkomponenterna adresseras via en adress som är indelad i en subnet- och nodadress. Nodadressen definierar systemkomponenterna själva. Alla systemkomponenter för en bana (lane) måste vara inställda för samma subnet-adress (tavelnummer). Detta sker antingen via en LNR-box (Lane Number Box) och tillhörande vridströmbrytare eller genom inställningar och programmering som hos kontrollenheten (se "System\Hårdvara\Manöverenhet\Set Subnet" och "System\Hårdvara\Figur\Anslut").

Systemkomponenterna detekterar automatisk om de adresserade komponenterna är tillgängliga.

## 11. Underhåll

### 11.1. Rapporter

Rapporten över inställningarna har reducerats så långt att den endast omfattar inställningar som skiljer sig från fabriksinställningarna.

```

Inställningar Tavla/Bana 57:
Figur byte:
B4      A
Filter (Aktiverad):
Shoot Type:
Fria serier
Cardinal:
Demo (På)
Skott sensor (Av)
Språk (Svenska)
Subnet (57)
LongCard:
Skytt nummer.....156944
Vapen Nr.....0
Egna skott.....0
Kors skott.....0
Bommat skott.....0
Demo skott.....8
Ogiltigt skott.....0
Manuella 0-skott...0
Test skotträknare...0
String:
Skyttens namn.....
Nation.....
Reset Date.....26.1. 13:06

```

Rapport från CU931 med subnet-adress 57

Tavelbild B4 har omprogrammerats till slot "A". (Standard skulle vara "B".)

Filtret "Shoot type" är aktiverat. En Fri Serie är inställd. (Filtret Shoot type är ett internt filter som inte kan påverkas av användaren.)

Inställningen "Språk" har ändrats från fabriksinställningen "Engelska" till "Svenska".

Skyttnumret och skotträknaren är inställbara. Men de lagras inte som kundinställningar.

Skyttens namn och "Reset Date" från skotträknarna är textinställningar. De lagras inte heller som kundinställningar.

Efter fullständig inställning av kontrollenheten efter användarens önskemål är det meningsfullt att skriva ut och arkivera rapporten över inställningarna. Med hjälp av rapporten kan även en reparerad eller utbytt manöverenhet åter ställas in för den önskade konfigurationen.

### 11.2. Skottrapport

Skottrapporten kan användas för redovisningar. Skottrapporten innehåller detaljerade uppgifter om de olika skotthändelserna.

```

Skottrapport (Tavla/Bana 57):
26.1. 16:50 - 26.1. 17:31
12  Egna skott
1   Kors skott
2   Bommat skott
8   Demo skott
0   Ogiltigt skott
1   Manuella 0-skott
4   Test skotträknare

```

Skotthändelser mellan kl. 16:50 och 17:31

## 12. Log

I den interna loggen är alla händelser lagrade som erfordras för dokumentationen och för en eventuell återställning efter ett strömbrott. Varje händelse visas på minst två rader. I den övre raden anges tidpunkten för händelsen i 1/100-sekunder. I den andra raden skrivs händelsens klass och en representativ text ut. Vid skott dokumenteras koordinaterna för skottläget på en ytterligare linje. Nedan förklaras de viktigaste uppgifterna i en loggskrift.

```

Log Rapport Tavla/Bana 57 1-26-2004 16:54:05
Version/Release:
Main
Main V7.1g Beta
28.7.2004 13:01
HIC=8002 PIC=606 Lon=2.0b
Grösse 49152:48
Frei 47994
13:06:14.12
DiagnosticE Rensa Log ()
13:06:16.60
DiagnosticE Omstart Manöverenhet ()
13:07:09.05
Skjutning... Start:Blanco 57/1
13:07:09.54
Omgång..... Start:
13:07:09.99
Grupp..... Start:
13:07:08.72
Skott..... 1 B 8 !P
X: -17.65 Y: 4.76
14:51:19.19
Grupp..... Stopp:
14:51:42.26
Grupp..... Start:
14:51:42.08
Skott..... 1 B 10*!
X: -2.31 Y: 2.55
14:51:42.25
Skott..... 2 C 10 !
X: -4.57 Y: -2.70
14:51:43.69
Skott..... 3 L 10 !
X: -7.32 Y: 0.44
14:51:43.87
Skott..... 4 D 9 !
X: 4.05 Y: -11.24
14:51:54.69
Skott..... 5 C 9 !
X: -10.12 Y: -11.05
14:52:03.38
Grupp..... Stopp:Delsumma 48

```

Subnet-adress för CU931 och aktuellt klockslag för utskriften

Mjukvaru- och hårdvaruversioner för CU931

av loggen upptagen minneskapacitet och antal logg-registreringar

Tillgängligt logg-minne

Diagnosinformation

Programstart; skapas när första skottet i programmet avfyras.

1:a skothändelsen i programmet

Start av 2:a gruppen

\* Innertia

! Demoskott

X/Y: koordinater i millimeter

Avslutning av 2:a gruppen

## 13. Taveltest

Utskrift av taveltesten:

```

Taveltest Tavla/Bana 57 28.7.2004 13:39
HIC=0 TIC=0 PIC=12
Ljussignal=Urkopplad
Temperatur=27.0 °C
Version/Release B.0f
Mix=0
Tidsdifferens=-60 ms
Rörligt mål=Urkopplad

```

Taveltesten ger information om mjukvaru- och hårdvaruversionerna samt information om den LON-mätelektronik som är inställd på samma tavelnummer som den manöverenhet från vilken taveltesten utlöses. Betydelsen av de olika värdena förklaras i följande tabell:

| <b>Variabel</b> | <b>Värde</b>                     | <b>Beskrivning</b>                    |
|-----------------|----------------------------------|---------------------------------------|
| HIC             |                                  | Lon-mätelektronikens hårdvaruversion  |
| TIC             | Target Index Code                |                                       |
|                 | 0                                | LON-mätelektronik utan tavla          |
|                 | 1                                | S10-LON                               |
|                 | 2                                | S25/50-LON                            |
|                 | 3                                | S25-LON                               |
|                 | 4                                | S110-LON                              |
|                 | 5                                | S310-LON                              |
|                 | 6                                | S3002-LON (galt 100 m tavla)          |
|                 | 7                                | Deltabar 100-LON                      |
|                 | 8                                | Deltabar 128-LON                      |
|                 | 9                                | S101-LON                              |
| MIX             | Mounting Index (Monteringsindex) |                                       |
|                 | 0                                | Normal                                |
|                 | 3                                | Upp-och-nedvänd montering             |
|                 | 5                                | Bak-och-fram-vänt                     |
|                 | 7                                | Upp-och-nedvänt och bak-och-fram-vänt |

PIC betecknar hårdvaruversionen och "Version\Release" betecknar mjukvaruversionen avseende LON-mätelektroniken. Tidsdifferensen erhålls från den tidpunkt vid vilken LON-mätelektroniken har avsänt taveltesten minus den tidpunkt vid vilken kontrollenheten utvärderar taveltesten. En tidsdifferens lägre än 100 millisekunder är normal. Större tidsdifferenser tyder på felaktig tidssynkronisering.

## 14. Tavlans mätelektronik (LME)

LON-mätelektroniken omfattar nedanstående komponenter. Dessa komponenter kan detekteras via taveltesten ("System\Underhåll\BITtest\Taveltest").

| <b>Komponent</b> | <b>Versionsexempel</b> |
|------------------|------------------------|
| Altera (FPLA)    | PIC=12                 |
| Hårdvara         | HIC=0                  |
| Tavelkod         | TIC=0                  |
| LON-mjukvara     | 2.0d                   |

I mätelektroniken måste samma tavelnummer (subnet-adress) finnas som hos den tillhörande kontrollenheten. Tavelnumret kan endast programmeras via kontrollenheten. Förfarandet beskrivs i kap. "Anslutning av tavlan" eller i "Bilaga till driftsinstruktion för System 7" under "\System\Hardvåra\Figur\Anslut".

Alternativt kan dessutom tavlorna bestyckas med en LNR-box eller en LNR-kretskort. I ett sådant fall behövs inte programmeringen via kontrollenheten.

## 15. PC dator

Med hjälp av en "LON-dongle" kan även en vanlig dator (PC) anslutas till LON-nätverket. Det finns ett antal programvaror som tagits fram för drift tillsammans med manöverenheterna.

| Produkt           | Användningsområde                                                                                                       |
|-------------------|-------------------------------------------------------------------------------------------------------------------------|
| Barcode-bibliotek | Skapande av användarprogram, katalog över streckkoder för manöverenheten.                                               |
| SIUSDATA®         | Registrering av skjutresultat från flera banor; styrning och övervakning av en tävling och skapande av användarprogram. |
| SIUSRANK®         | Start- och rankinglistprogram för internationella tävlingar.                                                            |
| LONORG®           | Diagnos- och download-mjukvara för nätverk.                                                                             |
| SIUSLANE®         | Manöverenhetmjukvara för drift av ett detekteringssystem.                                                               |

## 16. Kontrollenhet



Kontrollenheten (CU931 eller FPE06) innehåller huvuddatorn för varje träffindikeringsanläggning. Det finns olika mjukvaruprogram som kan laddas in i dessa enheter. I den föreliggande dokumentationen beskrivs versionen "System 7".

I kontrollenheten finns följande komponenter:

| Komponent         | Versionsexempel |
|-------------------|-----------------|
| Print (Printkort) | Rev3            |
| Altera (FPLA)     | PIC606          |

| Komponent                | Versionsexempel |
|--------------------------|-----------------|
| Hårdvara                 | HIC8002         |
| LON-programvara          | 2.0b            |
| Manöverenhet-programvara | System V7.0i    |
| Bootstrap-Loader         | 1.0e            |

LON-programvaran och Manöverenhet-programvaran kan laddas med PC-programvaran LONORG®. För Bootstrap-loader-programvaran är denna funktion ännu inte tillgänglig. Altera-versionen kan ändras genom byte av en socklad IC-komponent. Genom att trycka ned Help-tangenten fås en utskrift av ovanstående uppgifter.

## 17. Uppstartsvarianter

| Uppstart-varianter | Beskrivning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kallstart          | <p>En kallstart äger rum när innehållet i det flyktiga minnet (RAM) har gått förlorat. Detta sker när buffertbatteriet inte längre kan försörja manöverenheten med tillräckligt mycket ström.</p> <p>En kallstart kan framtvingas genom att under tillkopplingen av manöverenheten på dess baksida hålla resetknappen intryckt med ett vasst föremål (t.ex. ett gem) – detta gäller för CU941. Resetknappen befinner sig på kretskortet innanför höljet och är åtkomlig genom den övre av de två små runda öppningarna bredvid video-kontaktboken.</p> <p>Vid en kallstart återställs inställningarna till kundinställningarna och innehållet i den interna loggen raderas.</p> |
| Varmstart          | <p>En varmstart äger rum när innehållet i det flyktiga minnet (RAM) fortfarande är intakt.</p> <p>Vid en varmstart ändras inga inställningar. Däremot kommer manöverenheten att återskapa ej avslutade program med återställningsfunktionen.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                |

## 18. Demoskott

Ett demoskott utlöses med Ins-tangenten under förutsättning att anläggningen är inställd för "Demo".

## 19. Fjärrkontroll



Fjärrkontroll lådan RC941 kan anslutas till kontrollenheten. Den är tänkt för skyttar så att de från sin placering kan inmata de viktigaste instruktionerna utan att behöva lämna sin placering.

### Zoom-knapp

Med ZOOM-knappen kan, såsom redan beskrivits i kap. "Manövrering", tavlans bildsegment förstöras.

### Meny-knapp

Under förutsättning av inställningen "\System\Hardvåra\RC92\Match Meny" är aktiverad kan man med Meny-knappen få kontrollmenyn som listfönster direkt på monitorn.



Med Meny- och Match-knappen kan sedan urvalet i detta fönster flyttas uppåt eller nedåt. När rätt instruktion valts ut kan denna bekräftas med Enter-knappen (Zoom-knappen). Om ingen action skall äga rum måste instruktionen "Cancel" utföras. Meny försvinner omedelbart när någon annan händelse (t.ex. skott eller felmeddelande) föreligger.

### Match-knapp

Match-knappen har, förutom den ovan beskrivna navigeringsfunktionen, under en ISSF-ställningsMatch en särskild funktion. Skytten kan genom nedtryckning av Match-knappen individuellt växla från prov- till tävlingsskott. Han får även återgå till provskott såvida han inte har startat Matchen. Denna funktion kan genomföras via RC941 (Fjärrkontroll lådan) eller på kontrollenheten med dess funktionstangenter. Efter provskott kan skytten växla tillbaka till det ordinarie programmet genom att trycka ned Match-knappen. Vid Fria Serier kan man med hjälp av Match-knappen stega genom prov, enkelskott och dolda skott.

Med programmet DIANA kan Matchknappen vid viltmålsskytte användas för att föra in en ny figur vid vändning av vagnen..

## 20. Återkommande frågor (FAQ)

- Varför är en viss instruktion eller en viss katalog inte åtkomlig via menyn?

*Med filterfunktionen kan menyområden undantas från visning. Se därför till att filtren är inställda enligt de individuella behoven.*

- Hur kan anläggningen genomtestas?

*I demo-moden kan man med Ins-tangenten hämta skott från LONmätelektroniken. Därigenom testas kommunikationen med LONmätelektroniken och funktionen hos stora delar av kontrollenheten. Demo-moden kan aktiveras/deaktiveras via "System\Inställningar\Annan\Demo". Aktuell aktiveringsstatus visas i statusfönstret.*

- Kontrollenheten förblir "OFFLINE" och skotten visas inte i det inställda programmet.

*Kontrollenheten kan inte kommunicera med LON-mätelektroniken. Kontrollera LON-mätelektronikens strömförsörjning samt konfigurationen av tavelnumret. Kontrollera kableringen och anslut eventuellt LON-mätelektroniken på nytt. (Se "Anslutning av tavlan".)*

- Kontrollenheten startar alltid med engelska som valt språk.

*Inställningarna inklusive språkvalet förblir intakta även vid ett strömavbrott. Det förloras först när buffertbatteriet är urladdat. Kontrollenheten visar (Lågt batteri eller CRC fault) efter uppstart i listfönstret och ger under startförloppet tre 'beep'-signaler i följd.*

- Hur kan man skjuta kommenderat på en skjutplats?

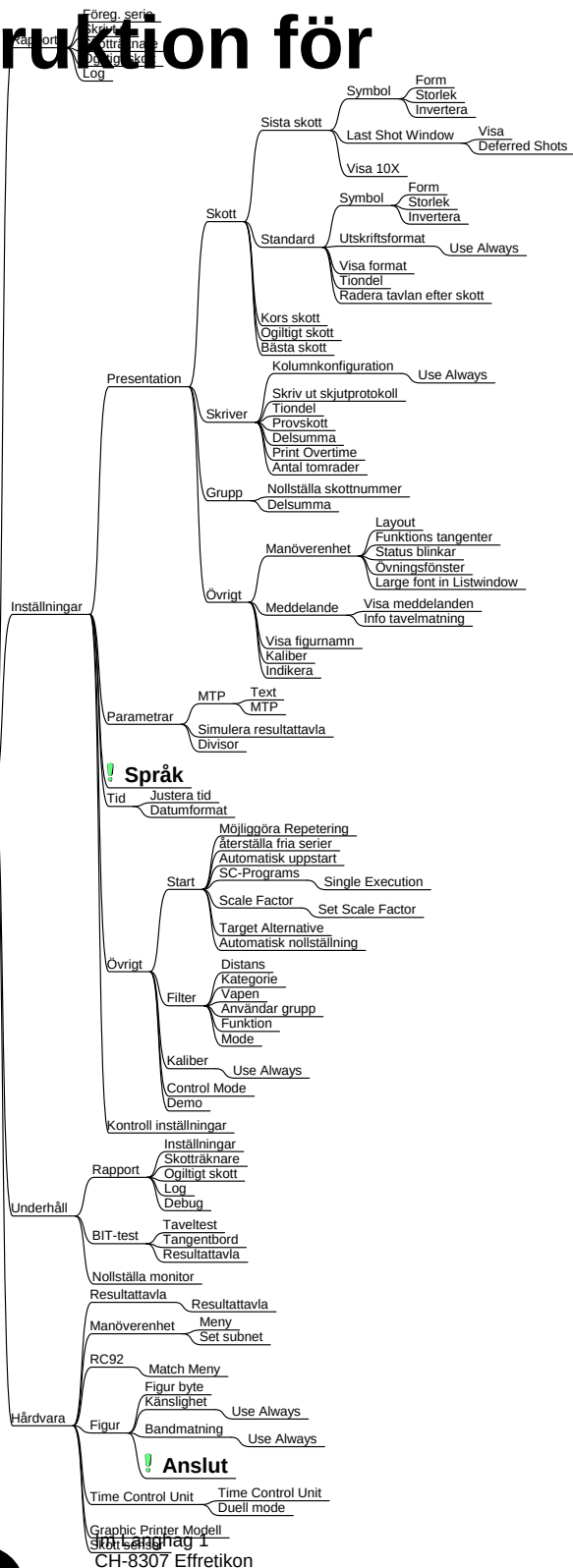
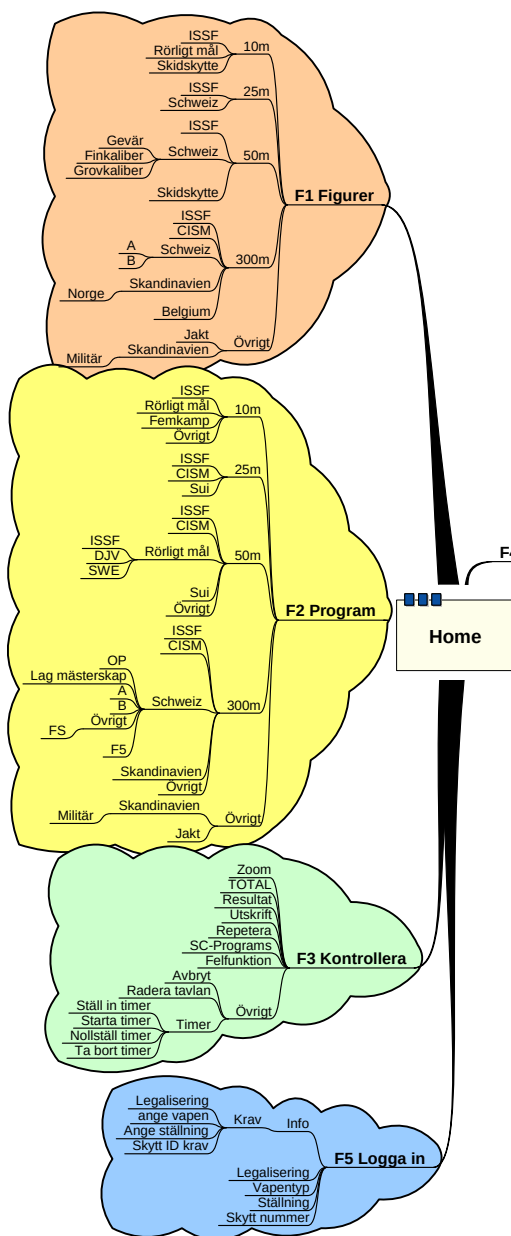
*Manöverenheterna kan fjärrstyras med PC-programvaran SIUSDATA®. Med denna programvara kan alla anslutna manöverenheter kontrolleras och konfigureras.*

## 21. Begreppsförklaringar

| <b>Begrepp</b>      | <b>Förklaring</b>                                                                                                                                                                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Användarprogram     | Ett användarprogram är ett skjutprogram som endast kan ställas in med hjälp av en streckodsläsare. Med produkterna Barcode-bibliotek och SIUSDATA® kan individuella användarprogram skapas och skrivas ut. Med ett användarprogram kan tavelbilden och programförloppet fördefinieras. |
| Fri Serie           | I huvudkatalogen "Tavla" kan alla tillgängliga tavelbilder väljas. Med detta urval väljs inte bara tavelbilden utan också en Fri Serie med denna tavelbild. En Fri Serie betecknar en flexibel programtyp.                                                                             |
| Grupp               | En grupp är en programenhet som sammanfattar ett antal skott vilka emellertid alla måste skjutas med samma skjutsätt. Ett program består ofta av flera grupper. För det mesta startar man med en grupp för provskott, därpå följer en eller flera grupper med enkel- eller serieskott. |
| Korsskott           | Om en skytt skjuter på en angränsande tavla kan den angränsande tavlan registrera ett "skott på fel tavla". För den egna tavlan skrivs en bom (0:a) ut. Denna detektering fungerar endast tillsammans med en avfyrsdetektor.                                                           |
| Kortinstruktion     | En kortinstruktion har skapats som ett separat dokument. Det föreligger flera kortinstruktioner med de resp. viktigaste programmen och instruktionerna för olika standardkonfigurationer.                                                                                              |
| LME                 | Se LON-mätelektronik.                                                                                                                                                                                                                                                                  |
| LON-mätelektronik.  | Kretskort i alla mättavlor med LON-mätssystem.<br>.                                                                                                                                                                                                                                    |
| Kontrollenhet CU941 | Kontrollenheten innehåller datorsystemet<br>. Numret 941 anger generationen.                                                                                                                                                                                                           |
| Match               | En Match betecknar ett skjutprogram som genomförs efter bestämda regler. Matcher förekommer framförallt vid ISSF-grenarna. En Match tillåter olika ställningar och den individuella manövreringen i fråga om provskott före var och en av dessa ställningar.                           |
| ME                  | Kontrollenhet                                                                                                                                                                                                                                                                          |

| <b>Begrepp</b>     | <b>Förklaring</b>                                                                                                                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program            | Se Skjutprogram                                                                                                                                                                                                   |
| Skjutprogram       | Överordnat begrepp för "Fri Serie", "Fast Program", "Användarprogram" och "Match".                                                                                                                                |
| Skott på fel tavla | Se Korsskott                                                                                                                                                                                                      |
| Subnet-address     | Alla komponenter på en linje (bana, tavla osv.) måste vara inställda för samma subnet-adress för att komponenterna skall kunna kommunicera sinsemellan. I regel tilldelas subnet-adresserna lika som tavelnumren. |
| Tavelfel           | Se "Korsskott".                                                                                                                                                                                                   |
| Tavelnummer        | Se "Subnet-adress".                                                                                                                                                                                               |

# Bilaga till driftsinstruktion för System 7



# SIUS AG

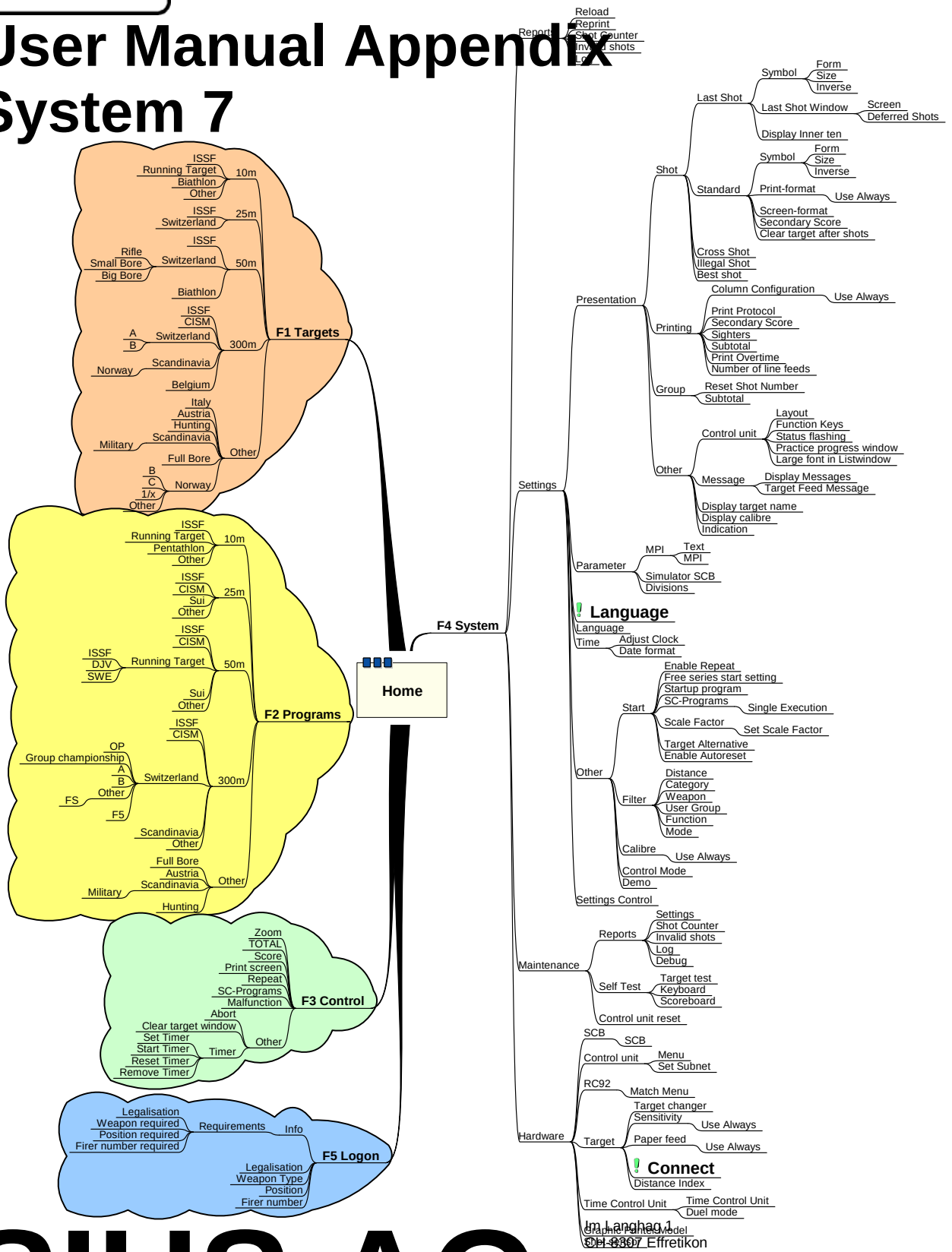
BASYS7AH1SR1

Menu.mmp - 21.03.2005

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# User Manual Appendix System 7



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| Simulator SCB             | 0               |
| Divisions                 | 0               |
| Language                  | 0               |
| Language                  | 0               |
| Time                      | 0               |
| Adjust Clock              | 0               |
| Date format               | 0               |
| Other                     | 0               |
| Start                     | 0               |
| Enable Repeat             | 0               |
| Free series start setting | 0               |
| Startup program           | 0               |
| SC-Programs               | 0               |
| Single Execution          | 0               |
| Scale Factor              | 0               |
| Set Scale Factor          | 0               |
| Target Alternative        | 0               |
| Enable Autoreset          | 0               |
| Filter                    | 0               |
| Distance                  | 0               |
| Category                  | 0               |
| Weapon                    | 0               |
| User Group                | 0               |
| Function                  | 0               |
| Mode                      | 0               |
| Calibre                   | 0               |
| Use Always                | 0               |
| Control Mode              | 0               |
| Demo                      | 0               |
| Settings Control          | 0               |



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| <b>Position</b>       | 0 |
| <b>Firer number</b>   | 0 |



## Targets

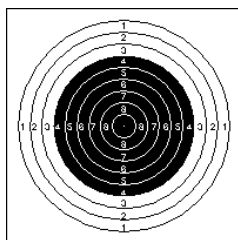
Free series are programs which do not prescribe any set numbers of shots. They are especially suitable for completing open training courses. With free series all official shoots can be simulated.

### 10m

The directory 10m is the compilation of all target images which typically are used over a distance of 10 metres.

#### ISSF

Official targets of the ISSF are filed in this directory.

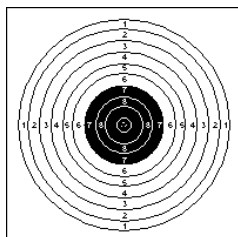


##### Air Rifle

10 metre running target; ISSF Rules, Section 6.3.2.3; diameter 45.5mm; black reflector from ring 4 to 9



06000019000201(62)



##### Air Pistol

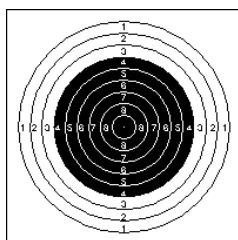
10 metre air pistol target; ISSF Rules, Section 6.3.2.6; diameter 155.5mm; black reflector from ring 7 to 10



06000019000203(56)

## Switzerland

Targets that are used only in Switzerland are stored in this directory.

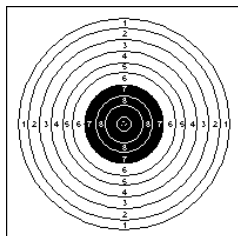


##### Air Rifle

10 metre target with the dimensions of the official ISSF target. But unlike the latter, with the secondary score in one hundredth rings instead of the one tenth ring score of the ISSF.



06000019000205(50)

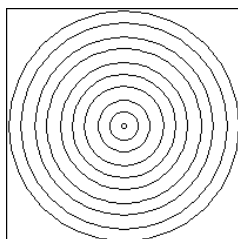


##### Air Pistol

10 metre target with the dimensions of the official ISSF target. But unlike the latter, with the secondary score in one hundredth rings instead of the one tenth ring score of the ISSF.



06000019000207(44)



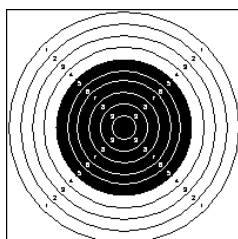
**Volkscheibe**

*A10 air rifle target with large 10-er ring for public events.*



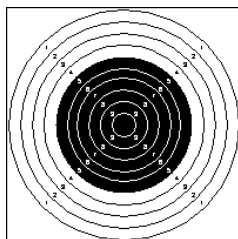
## Running Target

*The target pictures for the running target are filed in this directory. The discipline is also supported in the 10 metres by the ISSF.*



**Standard**

*10 metre running target; ISSF Rules, Section 6.3.2.7.2; diameter 50.5mm; black reflector from ring 5 to 10*



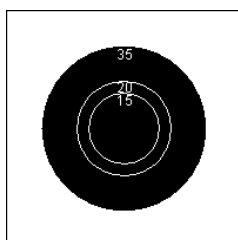
**Final**

*10 metre running target; ISSF Rules, Section 6.3.2.7.2; diameter 50.5mm; black reflector from ring 5 to 10*



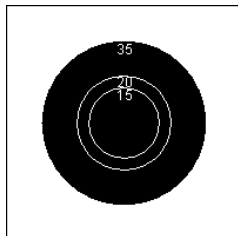
## Biathlon

*The target pictures for biathlon are filed in this directory. Biathlon targets can be found under 10 metres and 50 metres.*



**15**

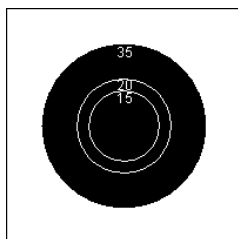
*Target image with 15 millimetre circle.*



**20**

*Target image with 20 millimetre circle.*

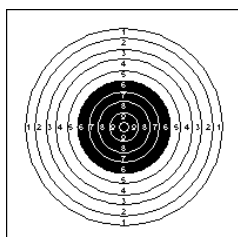




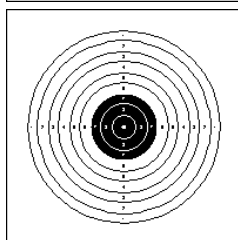
35  
Target image with 35 millimetre circle.



## Other



Zimmerstutzen  
German target



Croatian AR Target

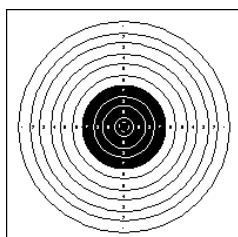


## 25m

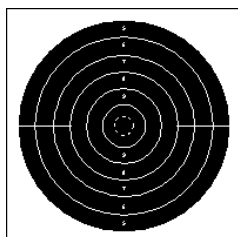
The directory 25m is the compilation of all target images which typically are used over a distance of 25 metres.

## ISSF

Official targets of the ISSF are filed in this directory.



Precision  
25 / 50 metre precision pistol target PP10; ISSF Rules, Section 6.3.2.5, Diameter 500mm; black reflector from ring 7 to ring 10

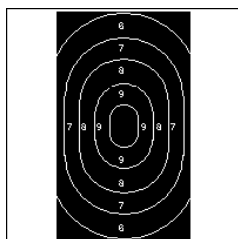


Rapid Fire  
25 metre rapid fire target, ISSF Rules, Section 6.3.2.4, Diameter 500mm; black reflector from ring 5 to 10



## Switzerland

Targets that are used only in Switzerland are stored in this directory.



O10

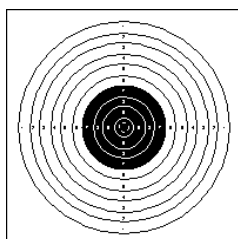
Swiss ordnance rapid fire pistol target (military);  
outline with ovals; Form 34.17



06000019000407(26)

## Big bore pistol

Many 25 metre targets are also shot with large calibre pistols (9.65mm). In order that the calibre setting can be correctly selected, these targets are listed twice.

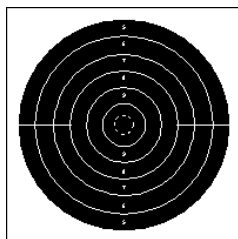


Precision

25 / 50 metre precision pistol target PP10; ISSF Rules, Section 6.3.2.5, Diameter 500mm; black reflector from ring 7 to ring 10



06000019000311(23)

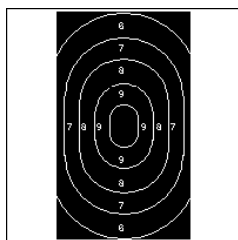


Rapid Fire

25 metre rapid fire target, ISSF Rules, Section 6.3.2.4, Diameter 500mm; black reflector from ring 5 to 10



06000019000313(17)



O10

Swiss ordnance rapid fire pistol target (military);  
outline with ovals; Form 34.17



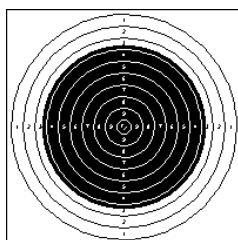
06000019000707(96)

## 50m

The directory 50m is the compilation of all target images which typically are used over a distance of 50 metres.

## ISSF

Official targets of the ISSF are filed in this directory.

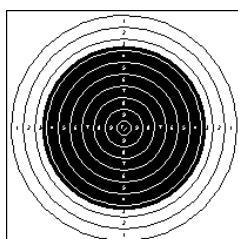


Rifle

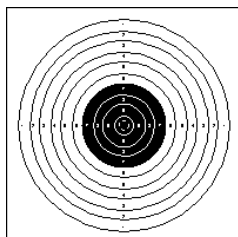
50 metre precision rifle target; ISSF Rules, Section 6.3.2.2; diameter 154.4mm; black reflector from one section of ring 3 to ring 10, diameter 112.4mm



06000019000301(53)



Final



Pistol

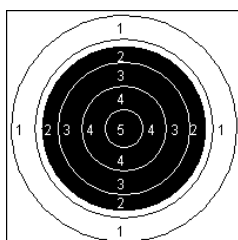
25 / 50 metre precision pistol target PP10; ISSF Rules, Section 6.3.2.5, Diameter 500mm; black reflector from ring 7 to ring 10



## Switzerland

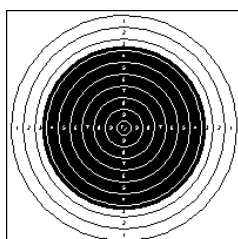
Targets that are used only in Switzerland are stored in this directory.

### Rifle



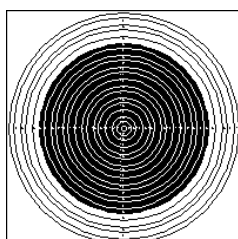
A5

50 metre small calibre rifle target with five rings; diameter 154.4mm; black reflector from one section of ring 2 to ring 5.



A10

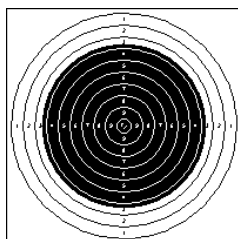
50 metre precision rifle target; ISSF Rules, Section 6.3.2.2; diameter 154.4mm; black reflector from one section of ring 3 to ring 10, diameter 112.4mm



A20

50 metre precision rifle target; diameter 154.4mm; black reflector from one section of ring 6 to 20, diameter 112.4mm





**A100**

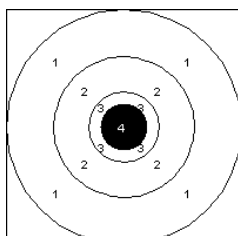
50 metre precision rifle target with a one hundred ring score instead of the ISS ten ring score; diameter 154.4mm; black reflector diameter 112.4mm



06000019000310(26)

## Small Bore

Swiss pistol targets with small calibre (5.6mm) setting.

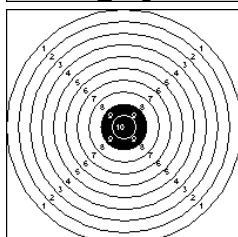


**PA4**

Pistol target A40; circular target with four rings.



06000019000401(44)

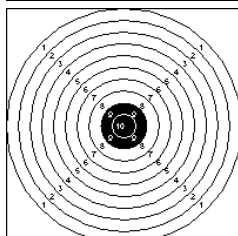


**PA10**

Pistol target A10; circular target with ten rings.



06000019000402(41)

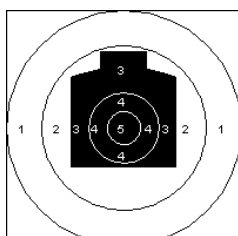


**PA100**

Pistol target A100; circular target with one hundred rings.



06000019000403(38)

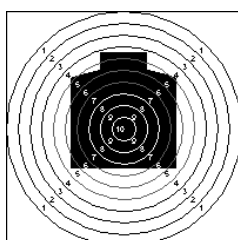


**PB5**

Pistol target B5; circular target with five equal rings and an outline whereby the outline is worth at least three points.



06000019000404(35)

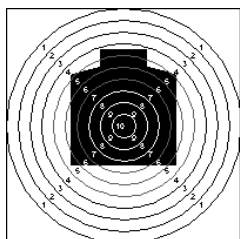


**PB10**

Pistol target B10; circular target with ten equal rings and an outline.



06000019000405(32)

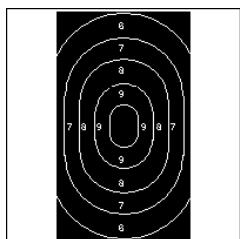


**PB100**

*Pistol target B100; circular target with one hundred equal rings and an outline.*



06000019000406(29)



**O10**

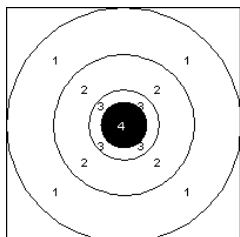
*Swiss ordnance rapid fire pistol target (military); outline with ovals; Form 34.17*



06000019000407(26)

## Big Bore

*Big bore pistol*

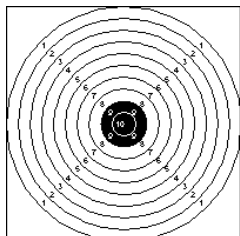


**PA4**

*Pistol target A40; circular target with four rings.*



06000019000701(17)

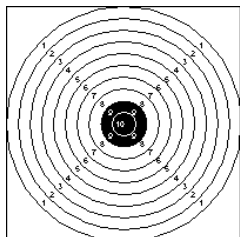


**PA10**

*Pistol target A10; circular target with ten rings.*



06000019000702(14)

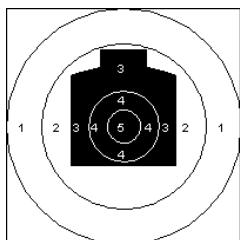


**PA100**

*Pistol target A100; circular target with one hundred rings.*



06000019000703(11)

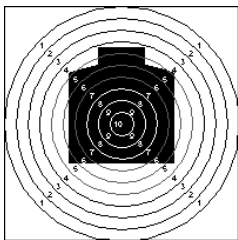


**PB5**

*Pistol target B5; circular target with five equal rings and an outline whereby the outline is worth at least three points.*



06000019000704(08)

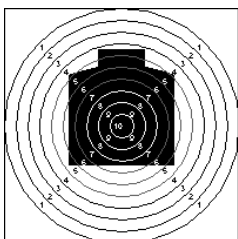


**PB10**

*Pistol target B10; circular target with ten equal rings and an outline.*



06000019000705(05)

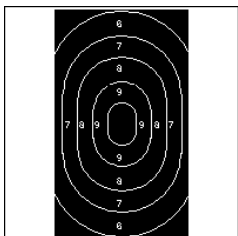


**PB100**

*Pistol target B100; circular target with one hundred equal rings and an outline.*



06000019000706(02)

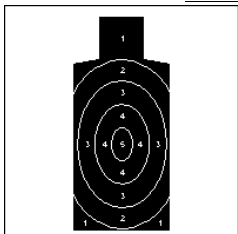


**O10**

*Swiss ordnance rapid fire pistol target (military); outline with ovals; Form 34.17*



06000019000707(96)



**Morgarten**

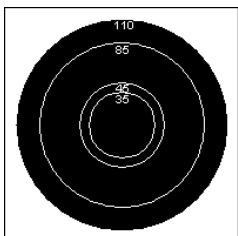
*Outline target with five scores, whereby the value two is assigned to five ellipses and the value one to the rest of the outline.*



06000019000410(17)

## Biathlon

*The target pictures for biathlon are filed in this directory. Biathlon targets can be found under 10 metres and 50 metres.*

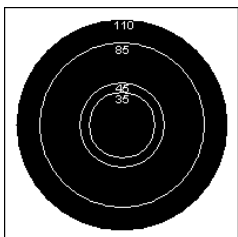


**35mm**

*Target image with 35 millimetre circle.*



06000019001306(45)

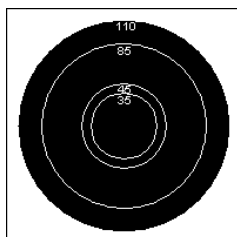


**45mm**

*Target image with 45 millimetre circle.*



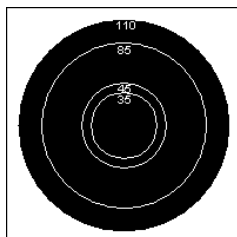
06000019001305(48)



**85mm**  
Target image with 85 millimetre circle.



06000019001304(51)



**110**  
Target image with 110 millimetre circle.



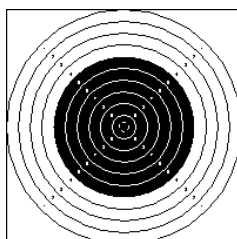
06000019001303(54)

## 300m

The directory 300m is the compilation of all target images which typically are used over a distance of 300 metres.

## ISSF

Official targets of the ISSF are filed in this directory.



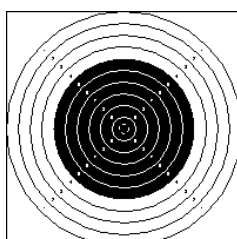
**A10**



06000019000002(77)

## CISM

The A10 target which is used in military contests does not differ from the A10 target which is used in ISSF disciplines. So that the filter function can be better used, the category CISM was separately introduced.



**A10**



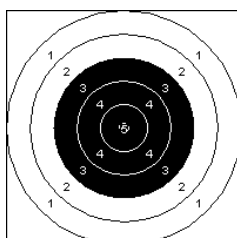
06000019000002(77)

## Switzerland

Targets that are used only in Switzerland are stored in this directory.

### A

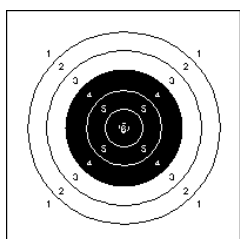
A-targets with varied scores:



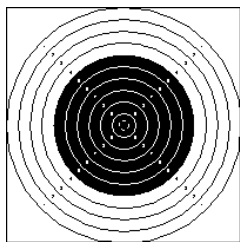
**A5**



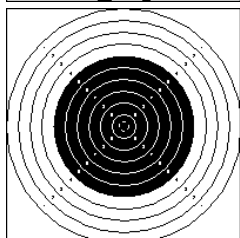
06000019000001(80)



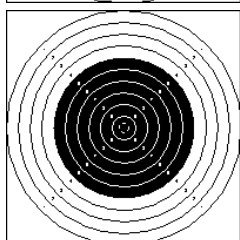
A6



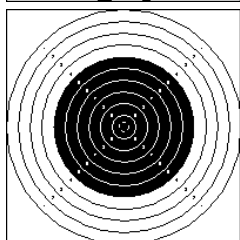
A10



A100



A10/FA10

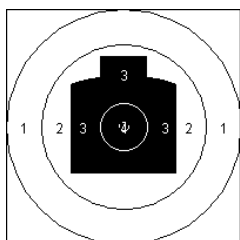


A10 final



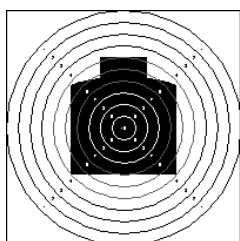
## B

B-targets with different scores (field target B Form. 34.21.2.88):



B4

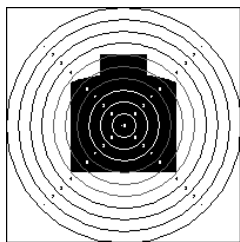




B10



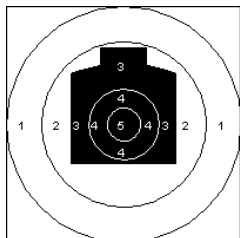
06000019000008(59)



B100



06000019000009(56)

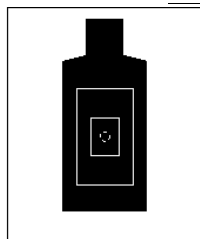


PB5

Pistol target PB5



06000019000010(53)



F5

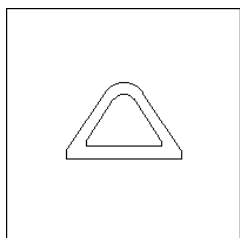


06000019000007(62)

## Scandinavia

Targets that are used only in Scandinavia are stored in this directory. The exception is animal images (moose and reindeer) which can be found under 'Other\Hunting\Moose'.

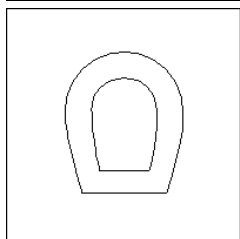
### Norway



Nor7



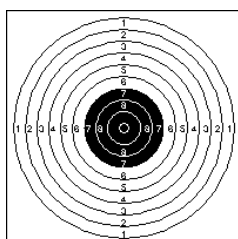
06000019001101(78)



Nor8



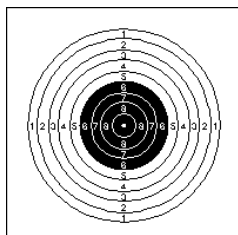
06000019001102(75)



NSF 15m



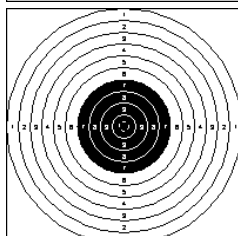
06000019001410(24)



DFS 15m



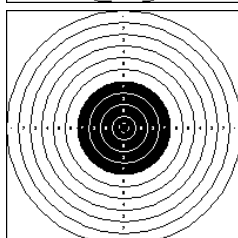
06000019001411(21)



DFS100



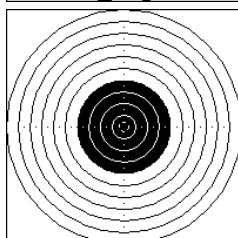
06000019001103(72)



DFS 200



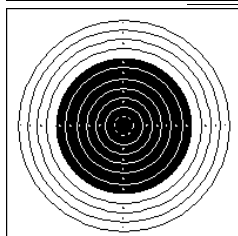
06000019001412(18)



DFS 300



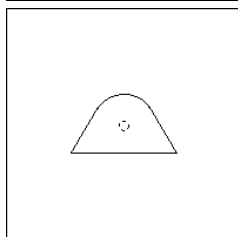
06000019001413(15)



New Swedish target



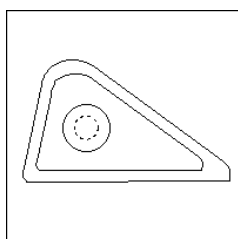
06000019001100(81)



16FIG



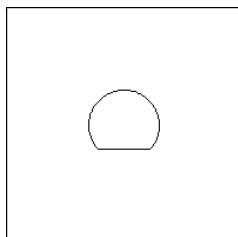
06000019001105(66)



16V



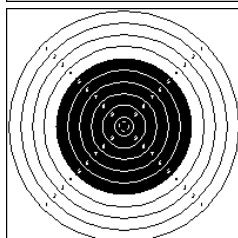
06000019001106(63)



C30



06000019001104(69)



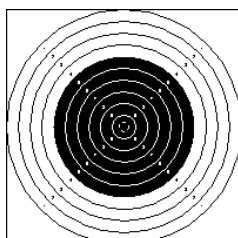
A10 Reduced 200



06000019001414(12)

## Belgium

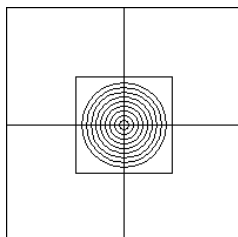
*Targets from Belgium*



A10



06000019000002(77)

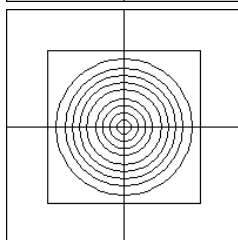


Oly100

*Oly100 Target*



06000019001501(42)

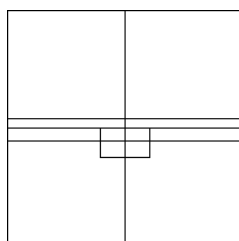


Oly200

*Oly200 Target*



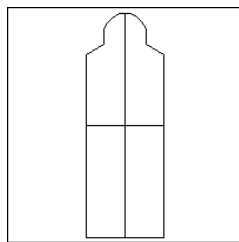
06000019001502(39)



Schijf K  
*Schijf K Target*



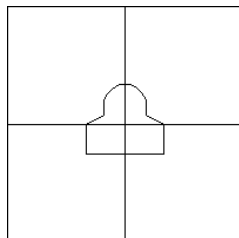
06000019001503(36)



Schijf 4  
*Schijf 4 Target*



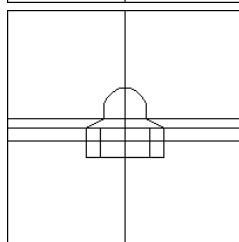
06000019001504(33)



Schijf 5  
*Schijf 5 Target*



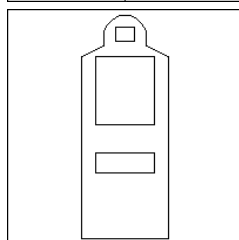
06000019001505(30)



Schijf S  
*Schijf S Target*



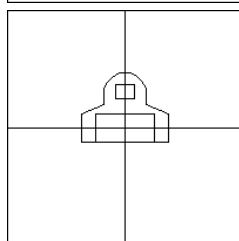
06000019001506(27)



NTTC4



06000019001507(24)



NTTC5

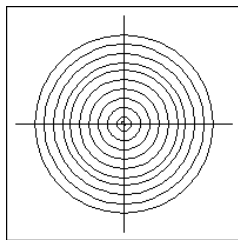


06000019001508(21)

## Other

*All targets that do not clearly fall under one of the preceding distances are included in the category 'Other'.*

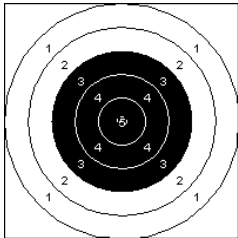
## Italy



Bersaglio 1



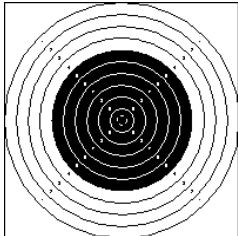
06000019002400(61)



Bersaglio 2



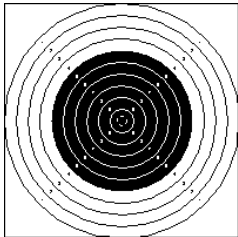
06000019002401(58)



Bersaglio 9



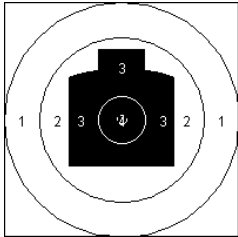
06000019002402(55)



P1



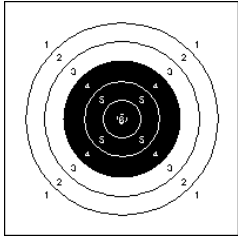
06000019002403(52)



P2



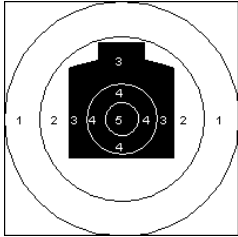
06000019002404(49)



P3



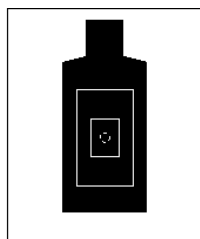
06000019002405(46)



A10 100m



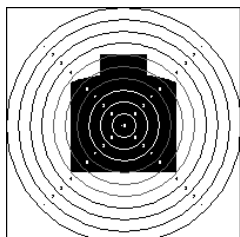
06000019002406(43)



A10 200m



06000019002407(40)



A10 300m

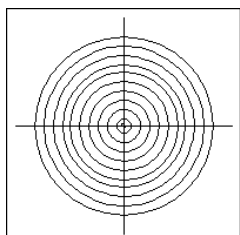


06000019002408(37)

## Austria

ASR

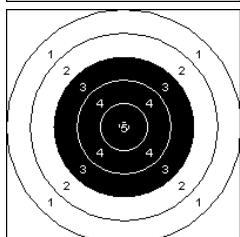
\ASR\Pistol



Pistol A 5m



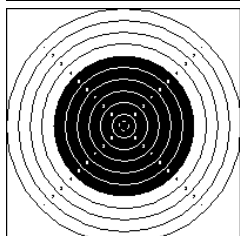
06000019001700(27)



Pistol A 10m



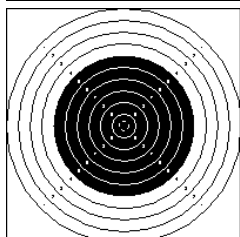
06000019001701(24)



Pistol B 5m



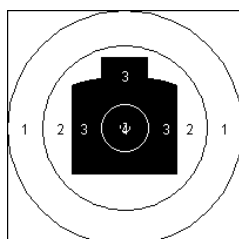
06000019001702(21)



Pistol B 10m



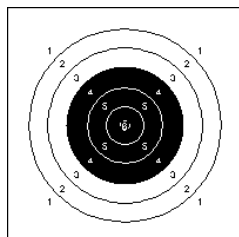
06000019001703(18)



Pistol D 5m



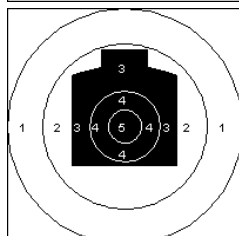
06000019001704(15)



Pistol D 10m



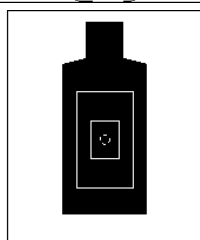
06000019001705(12)



Pistol C 7m



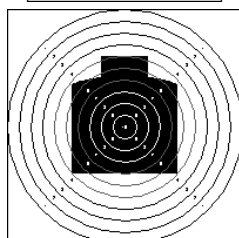
06000019001706(09)



Pistol C 15m



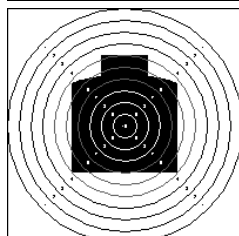
06000019001707(06)



Pistol C All



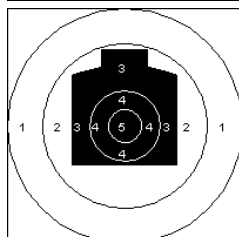
06000019001708(03)



Pistol E 20m



06000019001709(97)

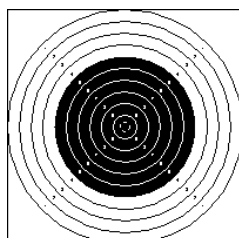


Pistol E All

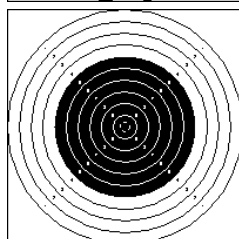


06000019001710(94)

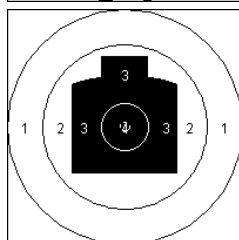
IASR\Rifle



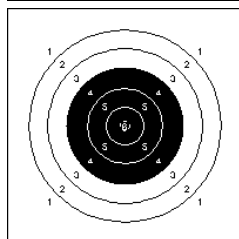
Rifle A 10m vertical



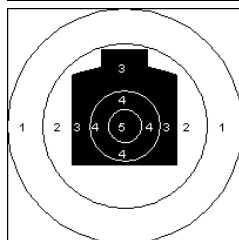
Rifle A 20m vertical



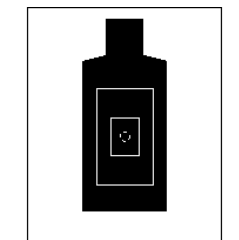
Rifle B 10m horizontal



Rifle B 20m horizontal

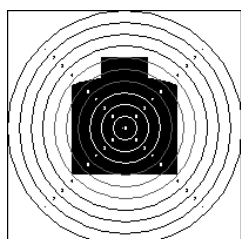


Rifle B 10m ellipse



Rifle B 20m ellipse

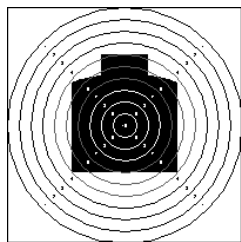




Rifle C 15m



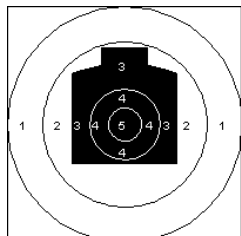
06000019001608(12)



Rifle C 30m



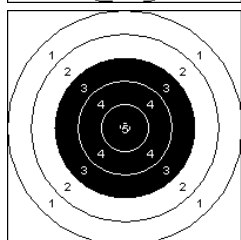
06000019001609(09)



Rifle C All



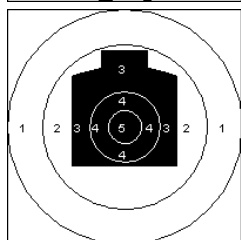
06000019001610(06)



Rifle D 40m



06000019001611(03)



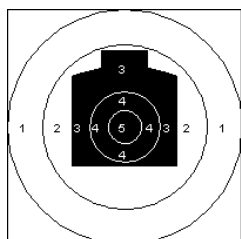
Rifle D All



06000019001612(97)

Classic

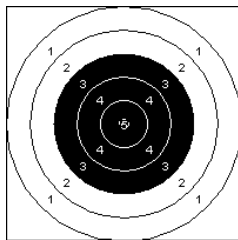
\Classic\Pistol



A10



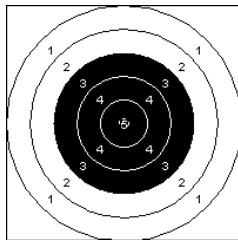
06000019001810(85)



A100



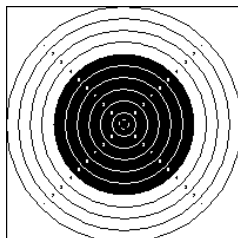
06000019001811(82)



Klein links



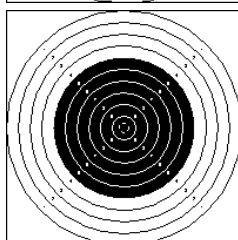
06000019001801(15)



Klein rechts



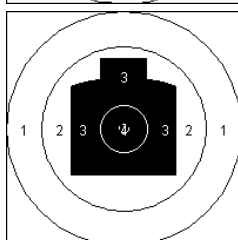
06000019001802(12)



Gross links



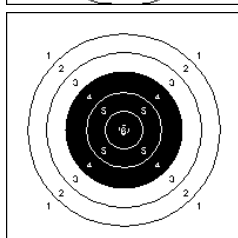
06000019001803(09)



Gross rechts



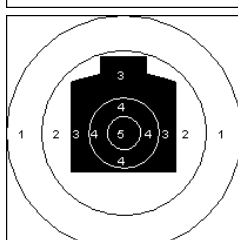
06000019001804(06)



Klein Klein



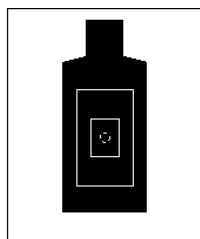
06000019001805(03)



Klein Gross



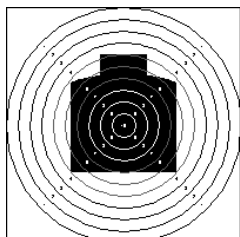
06000019001806(97)



Gross Klein



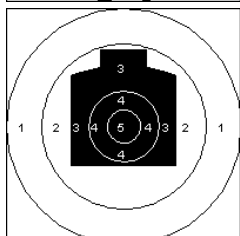
06000019001807(94)



Gross Gross



06000019001808(91)



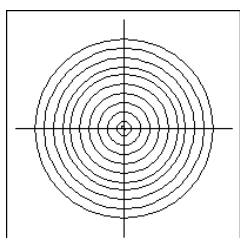
Precision

25 / 50 metre precision pistol target PP10; ISSF Rules, Section 6.3.2.5, Diameter 500mm; black reflector from ring 7 to ring 10



06000019001812(79)

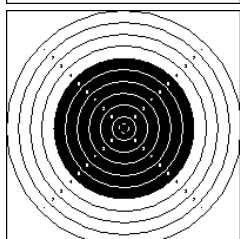
## \Classic\Rifle



R10



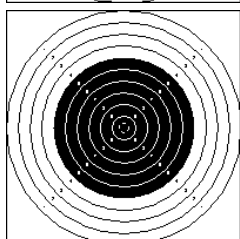
06000019001800(18)



A10



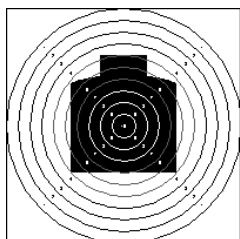
06000019000002(77)



A100



06000019000003(74)



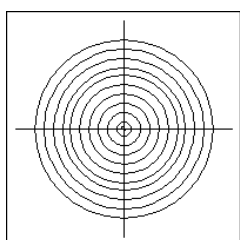
Anschluss Scheibe



06000019001809(88)

\Classic\MG

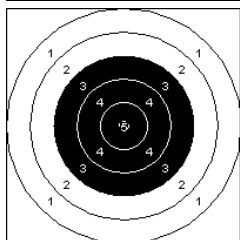
\Classic\MG\A



MG Ziel A1



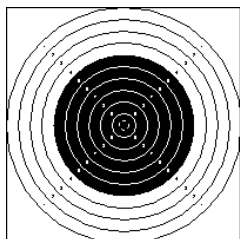
06000019001900(09)



MG Ziel A2



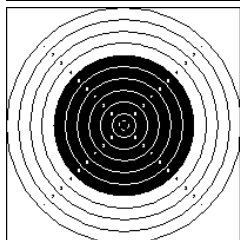
06000019001901(06)



MG Ziel A3



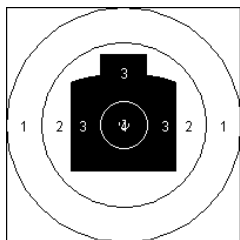
06000019001902(03)



MG Ziel A4



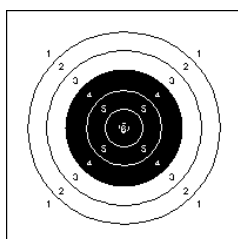
06000019001903(97)



MG Ziel A5



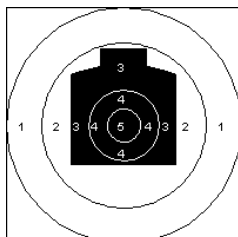
06000019001904(94)



MG Ziel A6



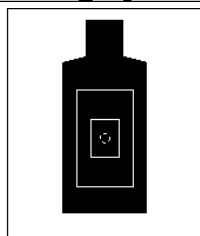
06000019001905(91)



MG Ziel A7



06000019001906(88)

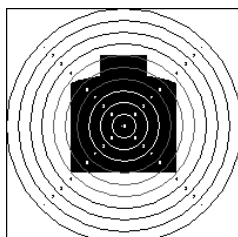


MG Ziel A8



06000019001907(85)

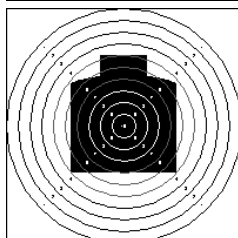
\Classic\MG\B



MG Ziel B1



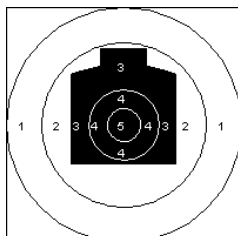
06000019001908(82)



MG Ziel B2



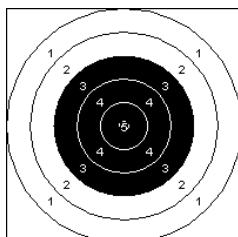
06000019001909(79)



MG Ziel B3



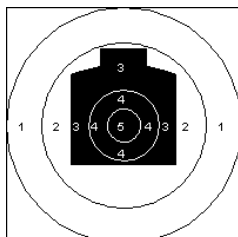
06000019001910(76)



MG Ziel B4



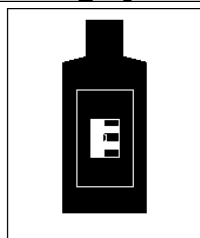
06000019001911(73)



MG Ziel B5



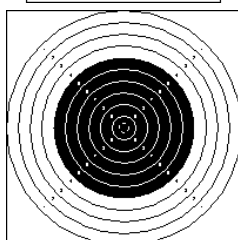
06000019001912(70)



MG Ziel B6



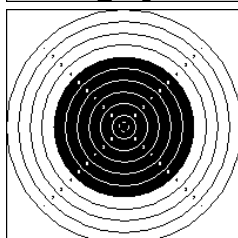
06000019001913(67)



MG Ziel B7



06000019001914(64)

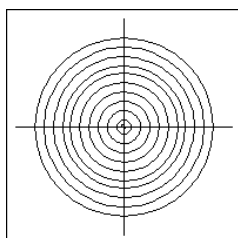


MG Ziel B8



06000019001915(61)

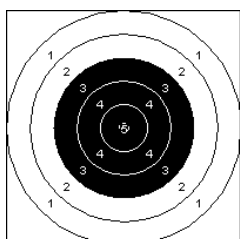
\Classic\MG\C



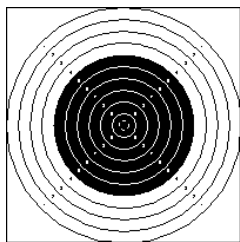
MG Ziel C1



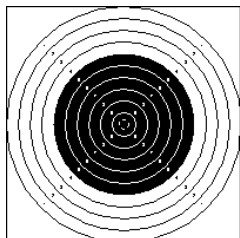
06000019002000(97)



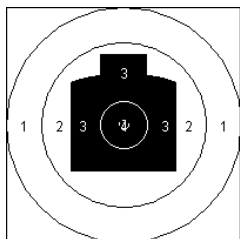
MG Ziel C2



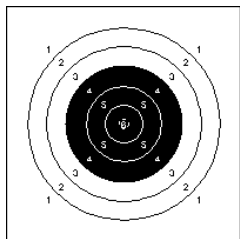
MG Ziel C3



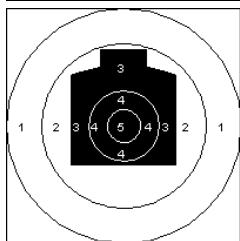
MG Ziel C4



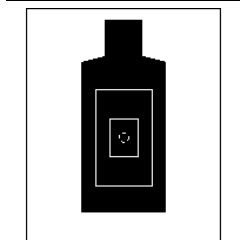
MG Ziel C5



MG Ziel C6



MG Ziel C7



MG Ziel C8



## Hunting

### Moose

*Summary of the moose targets:*

#### \Moose\Left

##### Moose 5-5-4-3

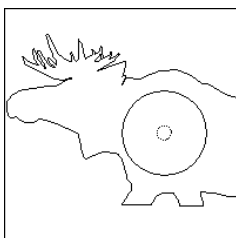
*Moose target with the scores 5-5-4-3 and 10-8-6-4.*



06000019001401(51)

##### Moose

*Moose target with tenner score.*



06000019001404(42)

##### Moose SWE

*Swedish moose target with 5-5-4-3 score.*



06000019001407(33)

##### Moose Calf

*Swedish Elk calf target with 5-5-4-3 and Hit-Score*

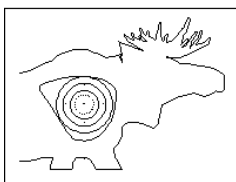


06000019001409(27)

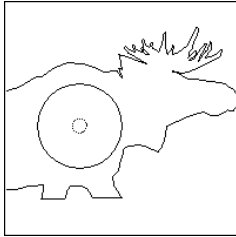
#### \Moose\Right

##### Moose 5-5-4-3

*Moose target with the scores 5-5-4-3 and 10-8-6-4.*



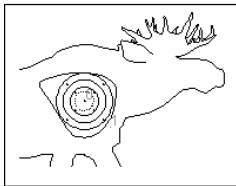
06000019001402(48)



**Moose**  
*Moose target with tenner score.*



06000019001405(39)



**Moose SWE**  
*Swedish moose target with 5-5-4-3 score.*



06000019001408(30)

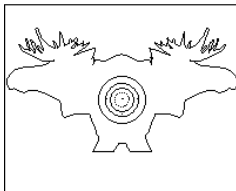


**Moose Calf**  
*Swedish Elkcalf target with 5-5-4-3 and Hit-Score*



06000019001415(09)

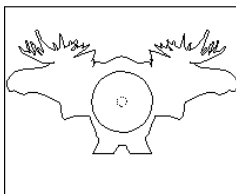
## \Moose\Double



**Moose 5-5-4-3**  
*Moose target with the scores 5-5-4-3 and 10-8-6-4.*



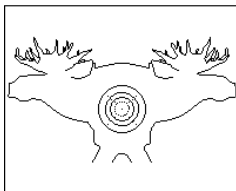
06000019001400(54)



**Moose**  
*Moose target with tenner score.*



06000019001403(45)



**Moose SWE**  
*Swedish moose target with 5-5-4-3 score.*



06000019001406(36)

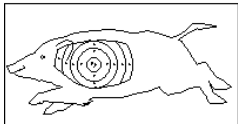
## Boar

*Summary of bore targets:*



### Wild Boar 5

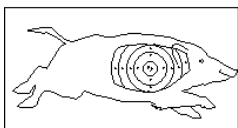
Running target 50 metre (ISSF-Bore 5; DJV No. 5);  
ISSF Rules Section 6.3.2.7.1  
Diameter 60mm



06000019000110(44)

### Wild Boar 5 Right

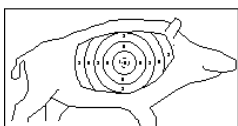
Running target 50 metre (ISSF-Bore 5; DJV No. 5);  
ISSF Rules Section 6.3.2.7.1  
Diameter 60mm



06000019000104(62)

### Wild Boar 2

DJV Number 2; Bore Art. No. S100AA010V1

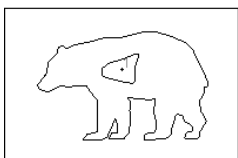


06000019001514(03)

## Bear

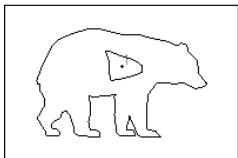
Bear Target

### Bear Left



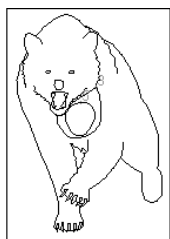
06000019001213(33)

### Bear Right



06000019001214(30)

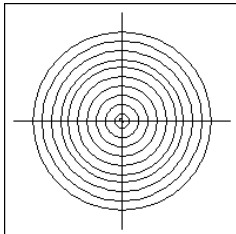
### Bear



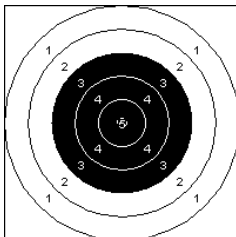
06000019001215(27)

## Other

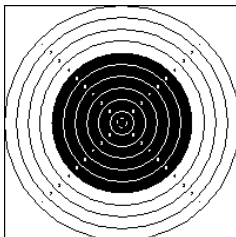
Bear Target



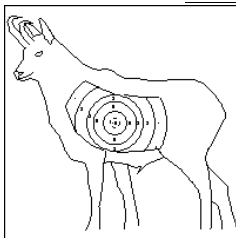
Kronhjort



Roebuck left

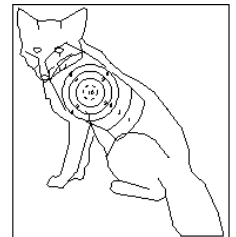


Roebuck right



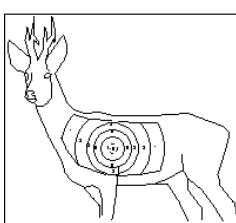
Chamois

DJV Number 1; Chamois Art. No. S100AA008V1



Fox

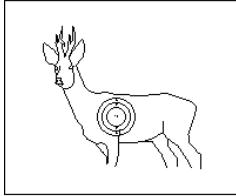
DJV Number 2; Fox Art. No. S100AA009V1



Roe

DJV Number 4; Roebuck Art. No. S100AA007V1

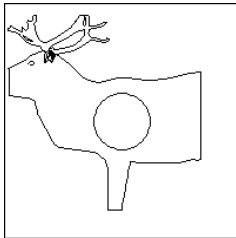




Danish Roebuck



06000019000115(29)

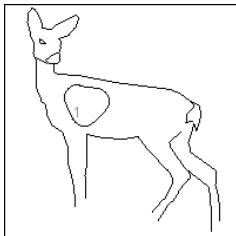


Reindeer

*Reindeer DV-! Norway; Art. No. S100AA012*



06000019000114(32)

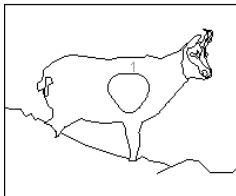


Roe Left

*Hubertus Reh linkslaufend (Spezielscheibe für Kanton St. Gallen)*



06000019000112(38)

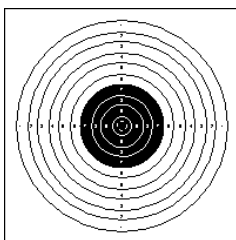


Chamois Hubertus

*Hubertus Gams rechtslaufend (Spezielscheibe für Kanton St. Gallen)*



06000019000113(35)



Precision

*25 / 50 metre precision pistol target PP10; ISSF Rules, Section 6.3.2.5, Diameter 500mm; black reflector from ring 7 to ring 10*

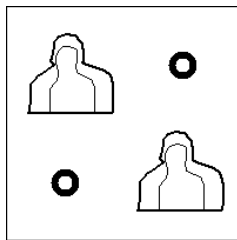


06000019000303(47)

## Scandinavia

*Targets that are used only in Scandinavia are stored in this directory. The exception is animal images (moose and reindeer) which can be found under 'Other\Hunting\Moose'.*

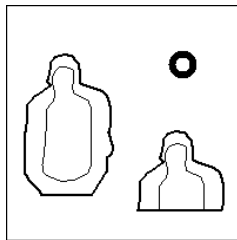
### Military



2x1/3 figure



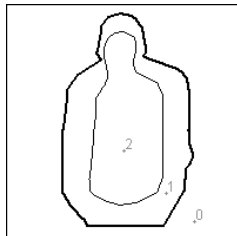
06000019001112(45)



1/1+1/3 figure



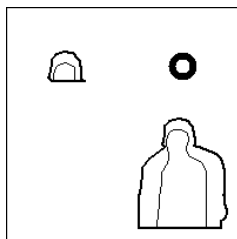
06000019001113(42)



Full Figure



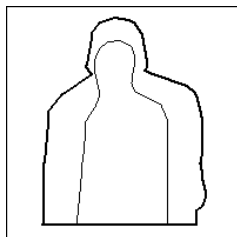
06000019001107(60)



1/8+1/2 figure



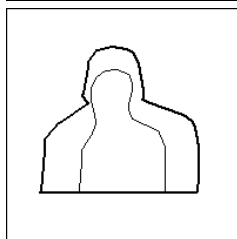
06000019001114(39)



Half Figure



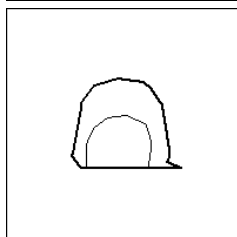
06000019001108(57)



One Third Figure



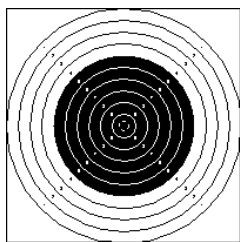
06000019001109(54)



Eighth figure



06000019001110(51)

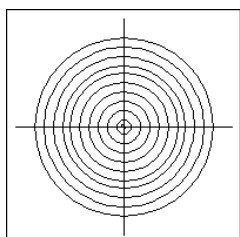


Precision



06000019001115(36)

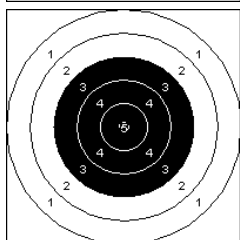
## Full Bore



300y



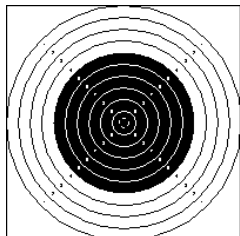
06000019002300(70)



500y



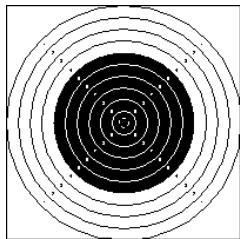
06000019002301(67)



600y



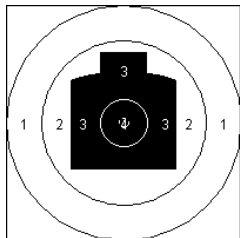
06000019002302(64)



300m



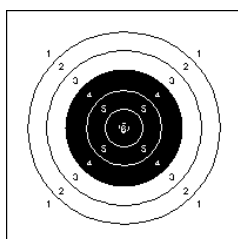
06000019002303(61)



500m



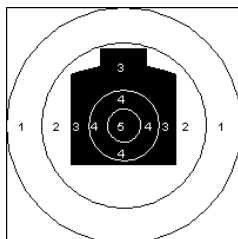
06000019002304(58)



600m



06000019002305(55)



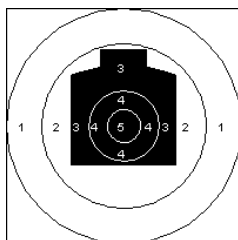
Long Range



06000019002306(52)

**Norway**

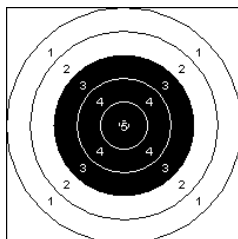
**B**



B45



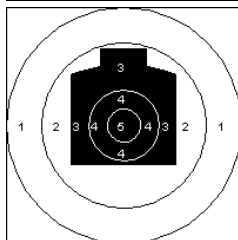
06000019002210(49)



B65



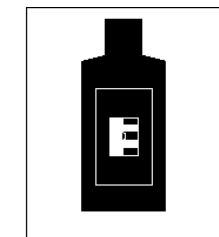
06000019002211(46)



B100



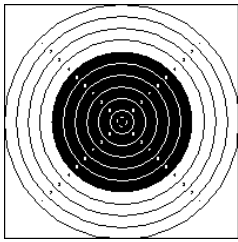
06000019002212(43)



Smaen



06000019002213(40)

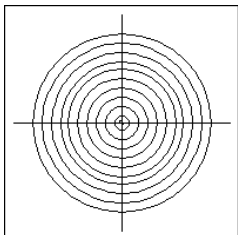


Minismaen



06000019002214(37)

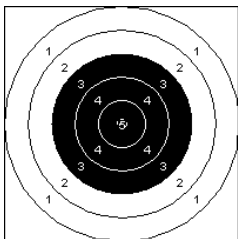
C



C15



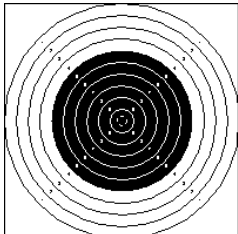
06000019002100(88)



C20



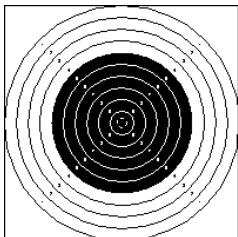
06000019002101(85)



C25



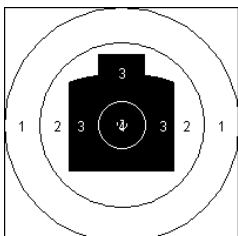
06000019002102(82)



C30



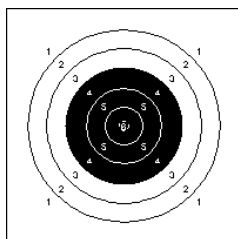
06000019002103(79)



C35



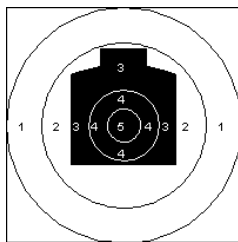
06000019002104(76)



C40



06000019002105(73)

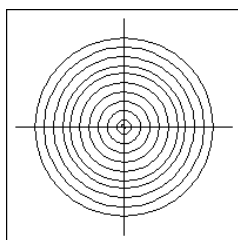


C50



06000019002106(70)

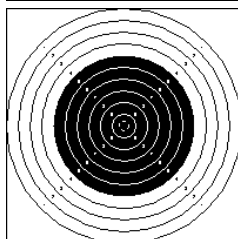
1/x



1/3Mini



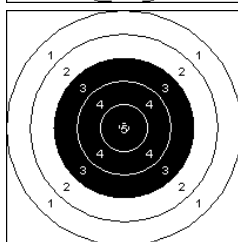
06000019002200(79)



1/3



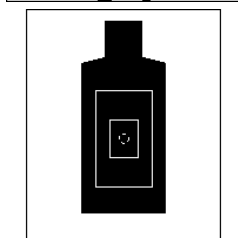
06000019002202(73)



1/4Mini



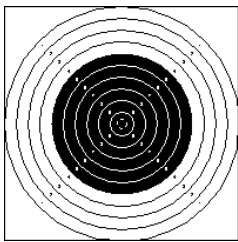
06000019002201(76)



1/4Figur



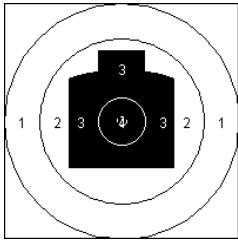
06000019002207(58)



1/4



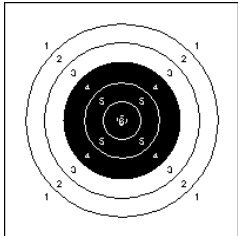
06000019002203(70)



1/6



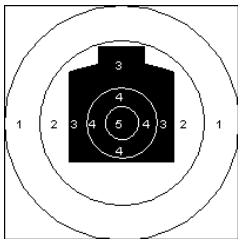
06000019002204(67)



1/8



06000019002205(64)

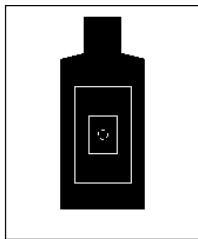


1/10



06000019002206(61)

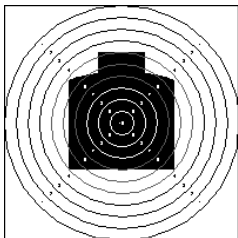
Other



13x40



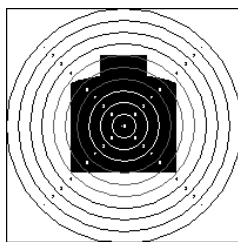
06000019002107(67)



30x10



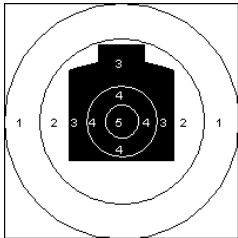
06000019002108(64)



Stripe



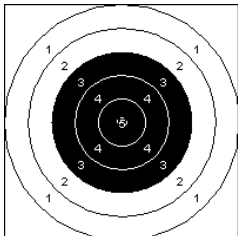
06000019002109(61)



Prisme



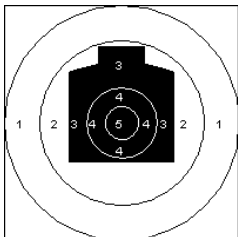
06000019002110(58)



S25



06000019002111(55)



Hjul



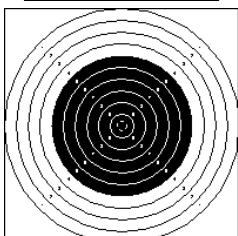
06000019002112(52)



150Sirkel



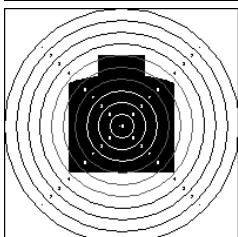
06000019002113(49)



55Sirkel



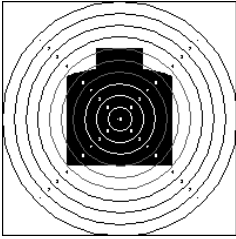
06000019002114(46)



40Tonne



06000019002208(55)



14Tonne



06000019002209(52)

## Programs

The programs are subdivided according to the usual distance, and according to categories of additional properties (e.g. Federation programs, group championships). The individual programs are designated with the target picture (e.g. A5), the type or fire (T=Test shots, S=Single fire, D=Serial fire) and the number of shots in this type of fire (T2 = 2 test shots, S5 = single fire 5 shots, D3 = serial fire 3 shots, T0 = test free/open, i.e. an open-ended number of test shots can be fired).

### 10m

The directory 10m is the compilation of all programs which typically are shot over a distance of 10 metres.

#### ISSF

Air Rifle 40



20000735(55)

Air Rifle 60



20000734(58)

Air Pistol 40



20000737(49)

Air Pistol 60



20000736(52)

#### Running Target

3030



20000760(77)

2020



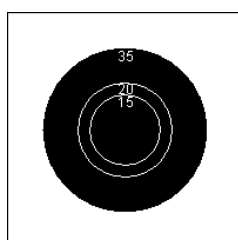
20000761(74)

Mixed



20000762(71)

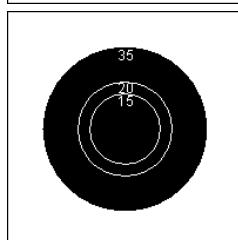
#### Biathlon



15mm



06000019001302(57)



20mm



06000019001301(60)

#### Pentathlon



Pentathlon 20



20000450(37)

Pentathlon 3\*10



20000460(07)

CE



20000451(34)

Sighters



20000452(31)

---

## Other

Air Rifle 30



20000756(89)

Air Rifle 20



20000757(86)

Air Rifle 3\*10



20000754(95)

Air Pistol 20



20000739(43)

Zimmerstutzen 30



20000748(16)

Rapid Fire Pistol



20000765(62)

---

## 25m

*The directory 25m is the compilation of all programs which typically are shot over a distance of 25 metres.*

## ISSF

Rapid Fire Pistol



20000730(70)

Sport Pistol



20000733(61)

Center Fire Pistol



20000731(67)

Standard Pistol



20000732(64)

---

## CISM

Sport Pistol



20000733(61)



Center Fire Pistol



20000731(67)

Military Rapid Fire Men



20000750(10)

Military Rapid Fire Women



20000753(01)

---

## Sui

OP



20000830(61)

FS



20000831(58)

---

## Other

SP15



20000751(07)

---

## 50m

*The directory 50m is the compilation of all programs which typically are shot over a distance of 50 metres.*

## ISSF

Rifle 60



20000725(85)

Standard Rifle 3\*20



20000726(82)

Free Rifle 3\*40



20000724(88)

Pistol 60



20000727(79)

---

## CISM

Rifle 60



20000725(85)

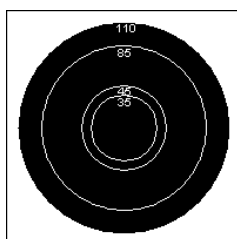
Standard Rifle 3\*20



20000726(82)

---

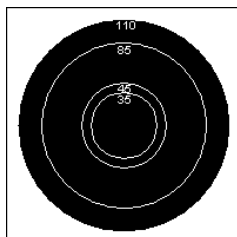
## Biathlon



35mm



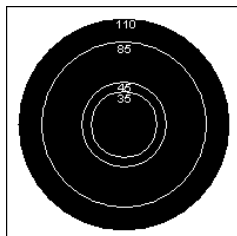
06000019001306(45)



45mm



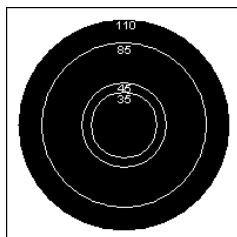
06000019001305(48)



85mm



06000019001304(51)



110



06000019001303(54)

## Running Target

ISSF

3030



20000770(47)

2020



20000771(44)

Mixed



20000772(41)

DJV

Wild Boar 5



20000775(32)

SWE



Running Roe buck



20000851(95)

Running Moose



20000852(92)

---

## Sui

OP



20000832(55)

FS



20000833(52)

Morgarten



20000361(13)

PB5

D4D6



20000072(07)

---

## Other

Rifle 3\*10



20000755(92)

Rifle 30



20000758(83)

---

## 300m

*The directory 300m is the compilation of all programs which typically are shot over a distance of 300 metres.*

## ISSF

Free Rifle 3\*40



20000721(97)

Free Rifle 60



20000722(94)

Standard Rifle 3\*20



20000723(91)

Rifle 2x30



20000717(12)

---

## CISM

Standard Rifle 3\*20



20000723(91)



Rapid Fire 3x20  
*Military Rapid Fire 3\*20*



20000816(06)

---

## Switzerland

### OP

Complete



20000840(31)

OP A5 Sighters



20000839(34)

OP Part 1

*A5 S5*



20000838(37)

OP B4 Sighters



20000836(43)

OP Part 2

*B4 S5 D2 D3 D5*



20000837(40)

---

### Group championship

A5P

*Unlimited test shots feature on the A5 window*



20000398(96)

A10P

*Unlimited test shots feature on the A10 window*



20000397(02)

Field A

*GM Field A*



20000084(68)

Field B

*GM Field B*



20000014(84)

Field D

*GM Field D*



20000083(71)

---

### A

VA5

VA5\Shot by Shot

S0



20011011(73)

S4



20000019(69)



S5



20000012(90)

S6



20000013(87)

S8



20000020(66)

S10



20000015(81)

---

VA5\Deferred

D0



20000010(96)

D5



20000023(57)

D6



20000024(54)

D3D3



20000025(51)

D4D4



20000026(48)

D5D5



20000016(78)

VA5\Deferred\Include sighters

P2 D2 D3 D5



20000344(64)

P1 D2 D3 D4 D5



20000346(58)

P2 D2 D2 D3 D3



20000348(52)

---

VA5\Combined

S4D4



20000006(11)

S5D3



20000021(63)



S2 D3 D5



20000009(02)

S4 D3 D3



20000022(60)

S5 D3 D4



20000007(08)

S6 D3 D3



20000676(38)

S2 D2 D3 D5



20000008(05)

VA\A5\Combined\Include sighters

S6D4



20000002(23)

P2 S1 D3 D6



20000027(45)

P2 S2 D3 D3



20000668(62)

P2 S2 D3 D5



20000003(20)

P2 S5 D3 D4



20000667(65)

P3 S6 D3 D3



20000001(26)

P2 D2 D2 D3 D3



20000005(14)

P1 S2 S3 S4 S5



20000004(17)

VA\A10

VA\A10\Shot by Shot

S0



20000031(33)

S5



20000033(27)



S6



20000034(24)

S8



20000035(21)

VA\A10\Shot by Shot\Include sighters

Opening shooting



20000763(68)

P2S6



20000666(68)

S10



20000029(39)

S6S4



20000038(12)

VA\A10\Deferred

D0



20000030(36)

D5



20000043(94)

D6



20000044(91)

D3D3



20000045(88)

VA\A10\Deferred\Include sighters

P2D1



20000694(81)

P2 D2 D3 D5



20000040(06)

P2 4\*D5



20000028(42)

VA\A10\Combined

S3D3



20000041(03)

S4D4



20000042(97)



S5D3



S6D4



S2 D3 D5



S2 D3 D5



S4 D3 D3



S3 S4 D4 D4



\A\A10\Combined\Include sighters

S4D4



S5D3



S6D6



P2 S5 D2 D3



P2 4\*D5



Prone 4\*S10



Standing 4\*S10



Kneeling 4\*S10



\A\A100

P0



\A\A100\Shot by Shot



|                         |                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------|
| S0                      | <br>20000051(70)   |
| S2<br><i>Nachdoppel</i> | <br>20000052(67)   |
| S3                      | <br>20000053(64)   |
| S4                      | <br>20000054(61)   |
| S5                      | <br>20000055(58)   |
| S6                      | <br>20000056(55)   |
| S10                     | <br>20000057(52)   |
| P1S4                    | <br>20000665(71) |
| D0                      | <br>20000050(73) |
| D4D4                    | <br>20000049(76) |
| P2 S5 D2 D3             | <br>20000058(49) |
| <hr/>                   |                                                                                                      |
| B                       |                                                                                                      |
| \B\B4                   |                                                                                                      |
| P0                      | <br>20000395(08) |
| \B\B4\Shot by Shot      |                                                                                                      |
| S0                      | <br>20000061(40) |
| S6                      | <br>20000062(37) |
| <hr/>                   |                                                                                                      |
| \B\B4\Deferred          |                                                                                                      |
| D0                      | <br>20000060(43) |



D5



20000064(31)

D6



20000063(34)

D3D3



20000065(28)

D4D4



20000066(25)

P2 D4 D6 KOM



20000349(49)

---

\B\B4\Combined

S3 D3 D3



20000067(22)

S3 D3 D6



20000379(56)

S3 D3 D3 D3



20000069(16)

S4D4



20000345(61)

S6 D3 D3 D6 KOM



20000359(19)

\B\B4\Combined\Include sighters

P2 S1 S3 S6



20000068(19)

P2 S2 D3 D5



20000669(59)

S4D4



20000070(13)

P2 S6 D6 D6



20000075(95)

---

\B\B10

P0



20000968(35)



---

|          |                                                                                                    |
|----------|----------------------------------------------------------------------------------------------------|
| S0       | <br>20000076(92) |
| D0       | <br>20000077(89) |
| S2 D3 D5 | <br>20000376(65) |
| S2D2     | <br>20000078(86) |
| D3D5     | <br>20000079(83) |

---

\B\B100

|     |                                                                                                      |
|-----|------------------------------------------------------------------------------------------------------|
| P0  | <br>20000967(38)   |
| S0  | <br>20000081(77)  |
| D0  | <br>20000080(80) |
| S10 | <br>20000082(74) |

---

\B\PB5

|      |                                                                                                      |
|------|------------------------------------------------------------------------------------------------------|
| P0   | <br>20000394(11) |
| S0   | <br>20000071(10) |
| D0   | <br>20000073(04) |
| D4D6 | <br>20000072(07) |

---

Other

|                 |                                                                                                      |
|-----------------|------------------------------------------------------------------------------------------------------|
| FS              | <br>20000059(46) |
| Knabenschiessen | <br>20000399(93) |

*The youth shooting practice is solely for the Zurich Youth Shoot. Therefore it has a special score (A6) and a special printout. In youth shooting 5 shots are fired at an A5 target. The innermost ring (5-er ring) is valued with 6 points. The outermost ring counts for 2*



*points instead of 1 point. Each hit outside the outermost ring that nonetheless hits the target counts for 1 point. Moreover at the end each target hit is further awarded 1 point and this sum is included in the total result. The maximum is therefore 5 x 6 points + 5 hits = 35 points.*

Morgarten



20000362(10)

Pfäffiker winter practice

*Hit score for single firer: every 10 shots in 10-er score; for group score 2. Pass (E4) in 100-er score.*



20000377(62)

Ustertag-Scheibe



20000738(46)

Vögelinsegg



20000363(07)

Hans Waldmann Schiessen



20000776(29)

F5

D0



20000976(11)

S0



20000986(78)

## Scandinavia

### Swedish program

Double

P0 S5 S5 S5 S5



20000718(09)

10

P0 S5 S5



20000719(06)

25

P0 S5 S5 S5 S5 S5



20000720(03)

### Swedish championship

First relay

P0 S5 S5 S5



20000705(48)

Middle relay

P0 S5 S5



20000706(45)

Final

P0 S5 S5



20000707(42)



Reserved  
P0 S5 S5 S5 S5



20000708(39)

Final reserved  
P0 S5 S5 S5



20000709(36)

## Other

Rifle 3\*10



20000728(76)

## Other

*All targets that do not clearly fall under one of the preceding distances are included in the category 'Other'.*

### Full Bore

3yDL



20000860(68)

5yDL



20000861(65)

6yDL



20000862(62)

LRDL



20000863(59)

## Austria

Pistol

\Pistol\1

1

Pistol A 5m



20000500(81)

Pistol A 10m



20000501(78)

\Pistol\2

2

Pistol B 5m



20000502(75)

Pistol B 10m



20000503(72)

\Pistol\3

3



Pistol D 5m



20000504(69)

Pistol D 10m



20000505(66)

---

\Pistol\4

4

Pistol D 5m



20000504(69)

Pistol D 10m



20000505(66)

---

5

5



20000504(69)

6

6



20000504(69)

7

7



20000506(63)

8

8



20000508(57)

9

9



20000508(57)

10

10



20000507(60)

11

11



20000509(54)

12

12



20000510(51)

---

Rifle

\Rifle\5

5

Rifle A 10m vertical



20000511(48)

Rifle A 20m vertical



20000512(45)

---

\Rifle\6

6



Rifle B 10m horizontal



20000513(42)

Rifle B 20m horizontal



20000514(39)

---

\Rifle\7

7

Rifle B 10m ellipse



20000515(36)

Rifle B 20m ellipse



20000516(33)

---

\Rifle\8

8

Rifle B 10m ellipse



20000515(36)

Rifle B 20m ellipse



20000516(33)

---

9

9



20000515(36)

10

10



20000515(36)

11

11



20000515(36)

12

12



20000519(24)

13

13



20000519(24)

---

\Rifle\14

14

Rifle C 15m



20000517(30)

Rifle C 30m



20000518(27)

---

15

15



20000520(21)

16

16



20000521(18)



---

## Scandinavia

*Targets that are used only in Scandinavia are stored in this directory. The exception is animal images (moose and reindeer) which can be found under 'Other\Hunting\Moose'.*

### Military

2x1/3 figure



20000740(40)

1/1+1/3 figure



20000741(37)

Full Figure



20000742(34)

1/8+1/2 figure



20000743(31)

Half Figure



20000744(28)

One Third Figure



20000745(25)

Eighth figure



20000746(22)

Precision



20000747(19)

---

## Hunting

Moose



20000850(01)

Moose LR Running



20000853(89)



## Control

The control menu contains all the functions that are necessary during a running program. The menu pops up automatically into this view after a program is selected.

### Zoom

Most target pictures can be represented in three different sizes (zoom levels). The zoom command switches to the next size. When the smallest size has been reached, then the next zoom command brings up the largest size again.



99052(52)

### Match

In the course of a match, by means of the Match button (RC92) the major commands for controlling the match can be carried out by the firer. Thus the setting can be changed from the test group to the first single group. So long as the single group has not yet shot, triggering this command again can enable a return to the test group. In user practices and in free series this command does not appear in the menu. In this case (if the RC92 is pressed or if the corresponding barcode is input) a group total is triggered.



990636(75)

### Sighters

In free series the fire type can be restarted at any time with the commands Test, Single and Series.



99063400(49)

### Shot by Shot

In free series the fire type can be restarted at any time with the commands Test, Single and Series. If the fire type is already set to single, with this command the single group can be totalised and immediately a new group can be started. In this way for example every 10 shots a group total of an ISSF shoot can be simulated.



99063401(46)

### Subtotal

Closes off the current open group and prints out a group total. The function is available only when an open group (P-, S- or D-) is shot. A group where the number of shots is prescribed cannot be skipped. If shooting takes place without a shot logoff, then shots which have totally missed the target must be reported to the system with the command 'Other/Insert zero shot'.



990530(05)

### Total

In a free series the group total corresponds to the intermediate total or to a position total. The current group is added up. This corresponds to a subtotal. In addition all the groups since the last group total are counted together and removed. Thereafter the group can be continued.



990531(02)

### TOTAL

In a free series the match total stops the current program (program total). It triggers a subtotal and a group total. In addition all shot values (except test shots) are added together and shown as the 'large' total. Other programs than the free series (match, user practice and fixed programs) cannot be stopped prematurely. They can only be broken off



990532(96)



and filled with manual nulls. An abort can be brought about by the command '\Other\Abort' or by loading another program. In the event of an abort the shot values are also added together and displayed.

#### Deferred

In free series the fire type can be restarted at any time with the commands Test, Single and Series. If the fire type is already set to Series, with this command the series group can be shown and totalised. Subsequently a new series group is automatically started.



99063402(43)

#### Show

In a group with serial shots all shots fired up to the present moment are displayed in advance. Correspondingly at the end of the group, only those shots which have not yet been displayed are shown. In groups with the fire type Test or Single Shot the barcode has no effect.



099054(46)

#### Score

In free series the command Value can change the secondary score to the primary score. This is useful if first a qualifier and then a final are shot. At most official shoots the finals are scored in tenths, but the qualifiers are scored in whole tens. If the command is carried out a second time, then the original score is switched on again. With the commands '\Other\Next Primary Score' and '\Other\Next Secondary Score' the primary and secondary scores can be controlled.



990643(54)

#### Print screen

The current screen content is printed on the graphic printer (Only D931/CBM210). It is not possible to print out on the dot matrix printer D93.



099050(58)

#### Repeat

Restarts a closed off practice with the same settings (firer name, weapon and position). This command can be blocked with the setting '\Other\Start\Permit Repeat\Off'.



91(18)

## SC-Programs

### Practice

In programs that show a match structure, under 'Group' it is possible to select which setting you want to begin with. In this way for example only the final of a match can be shot. During the match in progress, under 'Group' the setting 'Test' can be selected. This test corresponds to the regulated exceptional test which can be permitted after weapon malfunction. If the setting 'Test' is selected, then under 'Group' only the position that was shot most recently appears. Choosing this position enables you to return to the official match.

### Malfunction

In the 25m pistol disciplines, various rules are defined which lay down the procedures for weapon failures. According to the discipline and the type of weapon failure (allowable / non allowable) the fired shots must be completed and evaluated. Individual commands enable the system to correctly calculate the end result and to correctly show the individual shots on the screen as well as on the scoreboard.

#### Fill Series

The active group is stocked with zeros. This also happens when the group have not yet shot.



99063700(22)



## Insert zero shot

*Inserts a shot with the value 0 into the current program. This function is needed if shooting took place without the use of the shot sensor and the target was missed. The system itself cannot recognise the shot in this situation.*



099058(34)

## Allowable

*A permitted weapon malfunction (decision of the referee) permits the firer to complete the group according to the discipline (sport pistol, central fire pistol in rapid fire section) or to repeat it (standard pistol, rapid fire). The execution of this command produces at least one log entry.*



99063701(19)

## Non-Allowable

*Non allowable weapon failures normally result in the open group being completed with zero and no repeat being available to the firer. Additionally a log entry is produced.*



99063702(16)

## Compute series

*'Calculate series' completes the handling of weapon malfunctions. Even when several repetitions have had to be shot, on this command the shots are correctly selected and counted according to the rules of the ISSF.*



99063703(13)

## Other

*Frequently used operating elements can be found directly under the Control menu\Other.*

### Abort

*Produces in addition to the match total an abort (log entry) in order to mark the current group as invalid.*



50(44)

### Insert zero shot

*Inserts a shot with the value 0 into the current program. This function is needed if shooting took place without the use of the shot sensor and the target was missed. The system itself cannot recognise the shot in this situation.*



099058(34)

### Clear target window

*Clears the shots from the target window without removing them from the score. (see also the setting 'Clear target window after shots')*



099062(22)

### Clear List

*Clears all entries from the list window, without removing the fired shots from the score.*



990630(93)

### Convert last sighting shot



09906901(97)

### Convert both sighters



09906902(94)

## Timer

*This commands are used to control the embedded Timer.*

**Set Timer**

*Sets the Timer to the entered value and displays it in the titlebar*



990650(33)

**Start Timer**

*starts the timer*



990651(30)

**Reset Timer**

*Resets the timer to the value set by the Set Timer command*



990652(27)

**Remove Timer**

*Disables the Timer and removes it from the Display*



990653(24)

**Fix timer values**

*Here is a collection of fix timer values to configure the timer via Barcode*

**30s***30s*

9906600030(34)

**40s***40s*

9906600040(04)

**50s***50s*

9906600050(71)

**60s***60s*

9906600060(41)

**90s***90s*

9906600090(48)

**300s***5 min*

9906600300(97)

**1h***1h*

9906603600(91)

**Next Primary Score**

*Every target image has a number of score methods installed, which can be used to evaluate the target. With the command 'Other\Next Primary Score' these different score methods can be scrolled through. These amendments can only be made for free series. It should also be observed that different score methods are not strongly compatible one with another. It is therefore not advisable to change the score method while a program is running.*



9906421999(45)

**Next Secondary Score**

*Just as for the primary score, so too can the score method for the secondary score be changed.*



9906422999(52)

**Edit Barcode**

990646(45)



## System

Settings and commands that in normal shooting operation must rarely be changed or used. Some of the functions available are also reserved for specific user groups (administrator and Sius staff).

### Reports

With many reports information about past programs can be printed out.

#### Reload

The last ten groups can subsequently be loaded once more and considered with the discussion mode. However in a subsequently loaded group no further amendments can be carried out. The shot picture can in this way once again also be created from completed programs and displayed.

1

Load the last program that was shot in order that it can be discussed.



99063800(13)

2

Load the program before last in order that it can be discussed.



99063801(10)

3

Load the third from last program in order that it can be discussed.



99063802(07)

4

Load the fourth from last program in order that it can be discussed.



99063803(04)

5

Load the fifth from last program in order that it can be discussed.



99063804(01)

6

Load the sixth from last program in order that it can be discussed.



99063805(95)

7

Load the seventh from last program in order that it can be discussed.



99063806(92)

8

Load the eighth from last program in order that it can be discussed.



99063807(89)

9

Load the ninth from last program in order that it can be discussed.



99063808(86)

10

Load the tenth from last program in order that it can be discussed.



99063809(83)

#### Reprint

In the event of a paper jam or other printer problem it can happen that a score sheet does not print out as desired. Finished groups can therefore be repeatedly printed out.

1

Print out the last program again.



09905520(69)



2

*Print out the program before last again.*

09905521(66)

3

*Print out the third from last program again.*

09905522(63)

4

*Print out the fourth from last program again.*

09905523(60)

5

*Print out the fifth from last program again.*

09905524(57)

6

*Print out the sixth from last program again.*

09905525(54)

7

*Print out the seventh from last program again.*

09905526(51)

8

*Print out the eighth from last program again.*

09905527(48)

9

*Print out the ninth from last program again.*

09905528(45)

All

*Reprint all programs remaining in the log.*

09905529(42)

## Shot Counter

*Mechanical shot counters:*

The optional mechanical shot counter only counts the shots on your own target. It cannot be reset. Demo shots or inserted no scores are not counted. A detailed description of the whole function can be found in the user manual under 'Mechanical shot counters'.

*Software shot counters:*

The software shot counter counts shots in different categories. Own shots, cross shots, missed shots, demo shots etc. are differentiated and displayed separately. The shot count report is displayed in the list window and provided a printer is connected and switched on, is printed out. The shot counters are connected to the control units. If the settings are reset to factory settings, the shot counts are also reset to zero. The same occurs when the battery has to be changed. With a normal interruption to the power supply, the values are not lost. The software shot counters can also be reset independently of the settings under 'Maintenance\Reports\Shot Counters'.

### Report Shot Counter

The current shot numbers are displayed on the screen and on the printer.



09903608(82)

## Invalid shots

Non-allowable shots (shots during the Stop, Pause or the Show Phase and cross shots) are not only counted, they are kept in the control unit as pending and can be queried at any time. The shots are then shown with the time and if possible with the score. With a warm start or with the command 'Erase' under 'Maintenance\Invalid Shots' the report can be rejected. The shots remain in the log throughout and furthermore can be documented in a log printout.

### Show

The report on invalid shots is displayed in the list window.



990562(06)

### Print

The report on invalid shots is printed out on the connected printer. If the printer is not turned on, the report is rejected.



990564(97)



## Log

Events that are of relevance for the duration of a program are filed in the memory (events memory, log). This information is needed to be able to reproduce a program after a power interruption. The CU931 investigates this data at every system start-up. If it is established that the last program to be shot was not correctly ended, then a repetition process is introduced. By means of the log past programs can also be reloaded or a copy can be printed once again. The log is stored in the volatile memory of the control unit, which is buffered with a battery. The data is protected from misinterpretation by a check sum. If the check sum is not correct at system start-up, for example due to a faulty battery, the log is initialised again. The control unit communicates this by a triple beep and a report in the list window. The log is restricted in memory size. In the event of an overload, the oldest events are overwritten by the most recent on a rolling basis. Typically more than ten programs can be stored in the log. The log can also be manually erased under 'Maintenance\Reports\Log'. The format of the printout is described in the user manual.

### All

All events are printed out in chronological order. The oldest events first, and the most recent events at the end. The printout can be broken off at any time by switching off the printer.



09905500(32)

### 10

The ten most recent events are printed out in chronological order.



09905501(29)

### 20

The twenty most recent events are printed out in chronological order.



09905502(26)

### 50

The fifty most recent events are printed out in chronological order.



09905505(17)

### Inverse

All events are printed out in reverse chronological order, the most recent events first, and the oldest events at the end. The printout can be broken off at any time by switching off the printer.



09905509(05)

## Settings

The performance of the control unit can be adapted to the user's own needs by means of very many different settings. Programs can behave differently according to the properties selected. On the other hand, it is possible for fixed programs to overwrite particular properties. So for example shots are printed out differently in ISSF programs to other programs. It is also possible for programs to select a setting simply as a basic setting, which subsequently (after the program has been switched on) can be changed again by the user. The printout of shots in ISSF disciplines can subsequently be changed again under 'Presentation\Shot\Standard\Print format'.

## Presentation

All the settings that affect the images of objects in the wider sense are stored under 'Presentation'. This applies not only to representation on the screen, but also to forms of representation on the printer and other display equipment.

### Shot

The directory 'Presentation\Shot' contains settings which alter the appearance of the shots. This affects not only the shot symbol but also the image in the shot window, in the list window and on the printer.

### \Shot\Last Shot

In the directory 'Last shot' the settings which influence the depiction of the last represented shot are stored.

### \Shot\Last Shot\Symbol

The symbol of a shot can be varied according to appearance, size and background.

### \Shot\Last Shot\Symbol\Form

The form of the symbol can be preset individually for the last shot and jointly for all other shots.



Cross

*The shot is displayed with a cross.*



09907110(52)

Number

*The shot is displayed with its shot number.*



09907111(49)

None

*The shot is not displayed.*



09907112(46)

X

*The shot is displayed with an X.*



09907113(43)

Dot

*The shot is displayed with a dot.*



09907114(40)

Thin Cross

*The shot is displayed with a thin cross.*



09907115(37)

Circle

*The shot is displayed with a cross.*



99071106(17)

Calibre (Default)

*The shot is represented in its true dimensions as a circle, as long as it is no smaller than 5 Pixel. When the dimensions are too small, the image changes automatically to a 'cross'.*



99071107(14)

\Shot\Last Shot\Symbol\Size

*The image size of the shot can be altered. The size is given in screen dots (Pixels). In the calibre form this setting has no effect.*

14

*Dots*



99073300(31)

16

*Dots*



99073301(28)

18

*Dots*



99073302(25)

20

*Dots*



99073303(22)

22 (Default)

*Dots*



99073304(19)

24

*Dots*



99073305(16)

26

*Dots*



99073306(13)

28

*Dots*



99073307(10)



30

Dots



99073308(07)

32

Dots



99073309(04)

### \Shot\Last Shot\Symbol\Inverse

All symbols are primarily conceived as a white symbol on a dark background. Most targets are black in the centre. The graphics can be inverted. The symbol will then be depicted as a black symbol on a white background.

Off (Default)

The shot is represented normally.



09907140(59)

On

The shot is represented in inverse colours.



09907141(56)

### \Shot\Last Shot\Last Shot Window

In the shot window alongside the shot value, the shot number and a secondary score are indicated. In order to make the representation still clearer, it can be worthwhile to omit the secondary score or the shot number. It is also possible to switch the shot window off altogether.

### \Shot\Last Shot\Last Shot Window\Screen

In the shot window alongside the shot value, the shot number and a secondary score are indicated. In order to make the representation still clearer, it can be worthwhile to omit the secondary score or the shot number. It is also possible to switch the shot window off altogether.

Off

The display field for the last shot is faded out.



09907050(38)

Primary

In the shot window only the primary score is shown.



09907051(35)

SNr Prim

In the shot window the shot number and the primary score are shown.



09907052(32)

SNr Prim Sec (Default)

In the shot window the shot number, primary and secondary score (100-er score, ISSF tenner ring score) are displayed.



09907053(29)

Timer



09907054(26)

### \Shot\Last Shot\Last Shot Window\Deferred Shots

On (Default)

On



99080701(41)

Off

Off



99080700(44)

### \Shot\Last Shot\Display Inner ten

Most target pictures have a small ring defined which besides the normal score is valued as a particularly good hit. A hit in this ring (the inner ten, Mouche) can be displayed on the control unit by an animated picture on the target window.



Off

*An inner ten (Mouche) hit is displayed as normal.*



99074100(56)

On (Default)

*In the event of a hit on the inner ten (Mouche) the control unit shows concentric circles of different sizes one after another several times in the centre of the target.*



99074101(53)

---

\Shot\Standard

*In the directory '\Standard' all the settings which affect the depiction of all shots except the last shot are stored.*

\Shot\Standard\Symbol

*The symbol of a shot can be varied according to appearance, size and background.*

\Shot\Standard\Symbol\Form

*The form of the symbol can be preset individually for the last shot and jointly for all other shots.*

Cross

*The shot is displayed with a cross.*



09907030(01)

Number

*The shot is displayed with its shot number.*



09907031(95)

None

*The shot is not displayed.*



09907032(92)

X

*The shot is displayed with an X.*



09907033(89)

Dot

*The shot is displayed with a dot.*



09907034(86)

Thin Cross

*The shot is displayed with a thin cross.*



09907035(83)

Circle

*The shot is displayed with a cross.*



99070306(89)

Calibre (Default)

*The shot is represented in its true dimensions as a circle, as long as it is no smaller than 5 Pixel. When the dimensions are too small, the image changes automatically to a 'cross'.*



99070307(86)

---

\Shot\Standard\Symbol\Size

*The image size of the shot can be altered. The size is given in screen dots (Pixels). In the calibre form this setting has no effect.*

14

*Dots*



09907040(68)

16

*Dots*



09907041(65)



18 (Default)

Dots



09907042(62)

20

Dots



09907043(59)

22

Dots



09907044(56)

24

Dots



09907045(53)

26

Dots



09907046(50)

28

Dots



09907047(47)

30

Dots



09907048(44)

32

Dots



09907049(41)

#### \Shot\Standard\Symbol\Inverse

All symbols are primarily conceived as a white symbol on a dark background. Most targets are black in the centre. The graphics can be inverted. The symbol will then be depicted as a black symbol on a white background.

Off

The shot is represented normally.



09907320(04)

On (Default)

In the event of a hit on the inner ten (Mouche) the control unit shows concentric circles of different sizes one after another several times in the centre of the target.



09907321(01)

#### \Shot\Standard\Print-format

The print format dictates the image of a shot on the printout. Print formats are often prescribed directly by programs. So the printout at an international contest is laid out differently to that of a compulsory confederation practice in Switzerland.

#### \Shot\Standard\Print-format\Use Always

On



99073199(43)

Off (Default)



99073198(46)

Default (Default)

The printer prints the shot with shot number, direction arrow, primary and secondary score.



99073100(49)



## Xy

*On the printer the primary and secondary score and the XY coordinates are printed out.*



99073101(46)

## t x/y

*As well as the primary score, the time of the shot and its coordinates are displayed.*



99073109(22)

## Time

*In the 'Time' format the time difference from the first shot of the group is always depicted.*



99073108(25)

## Debug

*The debug format is only intended for test purposes. It supplies all the values which have been measured by the LON electronic measuring system. As well as register values the recorded temperature and other information is listed.*



99073102(43)

## \Shot\Standard\Screen-format

### Default (Default)

*The shot is displayed with shot number, direction arrow, primary and secondary score in the list window.*



99070800(62)

### Xy

*In the list window the primary and secondary scores and the XY coordinates are displayed.*



99070801(59)

### t x/y

*As well as the primary score, the time of the shot and its coordinates are displayed.*



99070809(35)

### Time

*Display format 'Time' the time gap to the first shot of the current group will also be displayed.*



99070808(38)

### Debug

*The debug format is only intended for test purposes. It supplies all the values which have been measured by the LON electronic measuring system. As well as register values the recorded temperature amongst others is listed.*



99070802(56)

## \Shot\Standard\Secondary Score

*The secondary score can be always switched off.*

### Off

*The secondary score is switched off.*



09907120(22)

### On (Default)

*The secondary score is switched on.*



09907121(19)

## \Shot\Standard\Clear target after shots

*In test and single groups the setting 'Clear target window after shots' enables the target window to be regularly cleared and so to remain clear. Thereby the shots are counted comprehensively by group. But this is only in test and single groups. In series groups all shots are shown one after another without shots being cleared in between. Consequently with the setting 10 in the following program: 'T2 S4 S4 S4' the target window is cleared after 2 shots*



(because the test group has come to an end and the shoot will continue with a single group). Additionally the same action is carried out in the last 'S4' group after the second shot (because 10 shots have been used in the single groups).

0

*Clears the target window after twenty shots.*



99078600(39)

5

*Clears the target window after five shots.*



99078605(24)

10 (Default)

*Clears the target window after ten shots.*



99078610(09)

20

*Clears the target window after twenty shots.*



99078620(76)

## \Shot\Cross Shot

*In the directory 'Cross shots' the settings which influence the depiction of cross shots (shots from another lane onto one's own target) are stored.*

### \Shot\Cross Shot\Show

*Cross shots are indicated with a symbol in the right bottom corner of the target window. The symbol remains active for seven minutes. If the last cross shot is more than seven minutes old, then the symbol is extinguished again. Additionally in the list window an entry can be generated which draws attention to the cross shot.*

Off (Default)

*The showing of cross shots is suppressed in the list window. The first cross shot is displayed with a symbol in the target window in the bottom right corner.*



09907060(08)

On

*Cross shots are displayed in the list window with the entry 'cross shot'.*



09907061(05)

### \Shot\Cross Shot\Print

*As well as being shown in the target window, cross shots can also be printed.*

Off (Default)

*Cross shots are not displayed on the printer. In particular if printing is done onto pre-printed sheets (federal programs, field shooting) cross shots may not influence the formatting.*



09907170(66)

On

*A cross shot is output on the printer.*



09907171(63)

## \Shot\Illegal Shot

*In the directory 'Invalid shots' all the settings which affect the depiction of shots outside the permitted time, during the stop, pause or show phase, are stored.*

### \Shot\Illegal Shot\Show

*Invalid shots can be displayed in the list window.*

Off

*The showing of non-allowable shots is suppressed in the list window.*



99073400(22)

On (Default)

*Invalid shots are indicated in the list window with 'Invalid Shot'.*



99073401(19)



---

### \Shot\Illegal Shot\Print

*Invalid shots can be printed.*

Off

*Invalid shots are not printed.*



99073500(13)

On (Default)

*An non-allowable shot is printed out on the score sheet as 'non-allowable shot'.*



99073501(10)

---

### \Shot\Best shot

*In serial groups the best shot (low shot) at the end can be shown once more and printed out in round brackets together with the shot number.*

Off

*The display of the best low shot is suppressed.*



99079700(37)

On (Default)

*The best low shot is displayed in series groups.*



99079701(34)

---

### Printing

*In the directory '\Presentation\Printing' all the settings which control the printer can be changed.*

### \Printing\Column Configuration

*For the matrix printer D93 printer paper which is perforated in the centre is available. With the column configuration the program can be set up to print out in two columns at once. The perforated paper can subsequently be separated down the middle. It should however be observed that certain shot print formats (e.g. with ISSF disciplines) cannot be placed on half of the paper. The information is cut off after 19 characters. This can lead to loss of information on the printout.*

### \Printing\Column Configuration\Use Always

On



99071399(11)

Off (Default)



99071398(14)

Left

*The program is printed out aligned left. The full width of the paper is available.*



09907130(89)

Right

*The program is printed out on the right half of the paper. Only half the width of the paper is available.*



09907131(86)

Double (Default)

*The program is printed out twice in parallel. Only half the width of the paper is available in each case.*



09907132(83)

---

### \Printing\Print Protocol

*The printing out of shots on the printer during a program can always be switched on and off with 'Print records'.*

Off

*The records are not printed.*



99076300(52)



On (Default)

*The records are printed.*



99076301(49)

### \Printing\Secondary Score

*Although the secondary score is shown, the printout of the secondary score can be suppressed.*

Off (Default)

*The secondary score is not printed.*



09907250(20)

On

*The secondary score is printed.*



09907251(17)

### \Printing\Sighters

*Test shots are usually printed out just like all other shots. However, in order that pre-printed score sheets are not overwritten with test shots, it is possible to block the printing out of test shots.*

Off

*Test shots are displayed only on the screen.*



09907160(96)

On (Default)

*Test shots are displayed on the printer. The exception to this is shooting programs consisting of only one test group. These shots are never printed. This was done so that pre-prepared score sheets could be used correctly.*



09907161(93)

### \Printing\Subtotal

*The shots of every group are counted together and the result is displayed in the list window and on the printer. It is possible to suppress these totals on the printout.*

Off

*Subtotals or group totals are not printed.*



09907210(43)

On (Default)

*Subtotals or group totals are printed.*



09907211(40)

### \Printing\Print Overtime

Off



99080600(53)

On (Default)



99080601(50)

### \Printing\Number of line feeds

*After a program the printer should advance the paper so far that with continuous paper it can be torn off correctly on the cutting edge of the printer. With pre-printed score sheets it can happen that this paper feed must be altered. With 'Number of Empty Lines' it is possible to specify how many empty lines (paper feed) should be printed after a program.*

0

*Empty lines*



99074000(65)

1

*Empty lines*



99074001(62)



|              |              |
|--------------|--------------|
| 2            |              |
| Empty lines  | 99074002(59) |
| 3            |              |
| Empty lines  | 99074003(56) |
| 4            |              |
| Empty lines  | 99074004(53) |
| 5            |              |
| Empty lines  | 99074005(50) |
| 6            |              |
| Empty lines  | 99074006(47) |
| 7            |              |
| Empty lines  | 99074007(44) |
| 8            |              |
| Empty lines  | 99074008(41) |
| 9            |              |
| Empty lines  | 99074009(38) |
| 10           |              |
| Empty lines  | 99074010(35) |
| 11 (Default) |              |
| Empty lines  | 99074011(32) |
| 12           |              |
| Empty lines  | 99074012(29) |
| 13           |              |
| Empty lines  | 99074013(26) |
| 14           |              |
| Empty lines  | 99074014(23) |

|                      |            |
|----------------------|------------|
| Number of line feeds |            |
|                      | 990645(48) |

After a program the printer should advance the paper so far that with continuous paper it can be torn off correctly on the cutting edge of the printer. With pre-printed score sheets it can happen that this paper feed must be altered. With 'Number of Empty Lines' it is possible to specify how many empty lines (paper feed) should be printed after a program.

## Shoot

With the settings 'Presentation\ Program' or 'Presentation\ Group' the form of depiction of expressions and readouts in the list window can be changed. But many programs have their own fixed format. These settings should only be changed in consultation with Sius AG.

## \Shoot\Print



---

### \Shoot\Print\Header

Empty



99075100(63)

Name (Default)



99075105(48)

Short



99075101(60)

Line feed



99075102(57)

---

### \Shoot\Programed Timers

*This settings determines if the programmed Timers for ISSF-Disziplines should be used or not.*

Off (Default)

*Disables the programmed Timers fo ISSF-Disziplines*



99080800(35)

On

*Activates the programmed Timers for ISSF-Disziplines*



99080801(32)

---

### Practice

*With the settings '\Presentation\ Program' or '\Presentation\ Group' the form of depiction of expressions and readouts in the list window can be changed. But many programs have their own fixed format. These settings should only be changed in consultation with Sius AG.*

### \Practice\Print

### \Practice\Print\Footer

Total (Default)



99075407(15)

Total with SeqNr



99075412(97)

---

### Group

*The directory '\Presentation\Group' contains settings which influence the behaviour of individual groups.*

### \Group\Reset Shot Number

*If this option is selected, the shots within this group are always numbered beginning with a 1. Otherwise the shots within the whole practice are continuously numbered. Test shots are excluded from this.*

Off (Default)

*The shot numbers are continuously numbered in a program.*



99073700(92)

On

*The numbering of the shots begins again with '1' with every group.*



99073701(89)

---

### \Group\Subtotal

*The group totals in a program can be displayed in the program progress window. For completed groups the fire type and the number of shots (e.g. E2 S4) are replaced by the respective subtotals.*



## Off (Default)

*The end of program window shows the types of fire and the active group.*



99073600(04)

## On

*In the program progress window the fire type of the concluded groups is replaced by the subtotal of the current group.*



99073601(01)

## Other

*In the directory 'Presentation\Other' can be found the settings which cannot be assigned to another group.*

### \Other\Control unit

*Settings affecting the basic layout of the image are stored under 'Screen'.*

### \Other\Control unit\Layout

*The image on the control unit can be adjusted to meet individual needs as far as possible.*

## Classic (Default)

*The classic representation best meets the most frequent needs of firers.*



99073900(74)

## Stop at Left

*If the screen is mounted on the right hand side of the firer, it can be useful for the status notification to be visible by means of a small movement of the head. For this reason the status window in the layout 'Stop Left' was moved. In the layout 'Stop Left' the status window was omitted for reasons of space. Parameters that are represented in the status window are no longer displayed in the list window.*



99073901(71)

## Final

*If the screen of the control unit is to be made visible also for the spectators, the target image can be made as large as possible with the 'Final' layout. In the 'Final' layout the status window, the practice progress window and the selection window are not shown.*



99073902(68)

### \Other\Control unit\Function Keys

*The window with the menu keys is displayed on the LCD of the control unit and at the lower edge of the screen. In portable devices (handheld) the function key window should not be switched off because this device has no LCD.*

## Off

*The bar with the function keys is concealed. Details of the keypad mode are only available on the LCD of the control unit.*



99074400(29)

## On (Default)

*The bar with the function keys is also overlayed on the screen.*



99074401(26)

### \Other\Control unit>Status flashing

*In order that the firer's attention can better be drawn to the screen, the most important status information (stop, offline) flashes in the status window. This effect, which can also be distracting, can be turned off with this setting.*

## Off (Default)

*The status window will indicate no status by flashing.*



99078800(21)



On

*The most important information (stop, offline, show) is displayed flashing.*



99078801(18)

---

### \Other\Control unit\Practice progress window

*The display of the program progress window can be suppressed.*

Off

*The end of program window is not displayed.*



99074300(38)

On (Default)

*The end of program window is displayed.*



99074301(35)

---

### \Other\Control unit\Large font in Listwindow

*Specifies font used in list window.*

Off (Default)

*Normal font is used in list window.*



99080200(89)

On

*Large font is used in list window.*



99080201(86)

---

### \Other\Message

*Under 'Messages' the way the control unit handles messages can be configured.*

#### \Other\Message\Display Messages

*The control unit displays various texts as reports in the list window. Many of these reports are laid out in such a way that they are also displayed on the LCD near the keyboard. With this setting these outputs can be limited.*

Off

*Reports are no longer displayed.*



99073800(83)

On-screen

*Only reports that are displayed in the list window are shown. The readouts on the LCD are suppressed. This setting is useful when the display screen is to be set up directly next to the control unit. In this situation readouts on the LCD can then be suppressed.*



99073801(80)

On LCD

*Only reports that are displayed in the LCD are shown. The readouts in the list window of the screen are suppressed. This setting is useful when the control unit is to be set up some distance away from the display screen. Usage is then mainly controlled via the LCD.*



99073802(77)

On Both (Default)

*All reports are displayed both on the LCD and in the list window of the screen.*



99073803(74)

---

#### \Other\Message\Target Feed Message

*The S10, the S25/50, the S101 and other targets have a materials handling (paper or rubber band feed). If the motors stall, the material runs out or the band jams, then the target reports a band feed error to the control unit. It is essential to correct this error as missing band feed can lead to incorrect measurements in the detection system. However, the display of the error message can be suppressed. This only serves a useful purpose when no targets with band feed have been installed or for test purposes, when no band is available, but the unit nonetheless needs to run in simulation mode.*



## Off

*Reported line feed errors are suppressed.*



99073000(58)

## On-screen (Default)

*Reported line feed errors are only displayed in the list window of the screen.*



99073001(55)

## On printer

*Reported line feed errors are only printed.*



99073002(52)

## On Both

*Reported line feed errors are shown in the list window and printed.*



99073003(49)

## \Other\Display target name

*The target description and the names of the active score methods are displayed in the upper left corner of the target window.*

### Off

*The target description and the score information are suppressed.*



99074200(47)

### On (Default)

*In the target window the target name and the score information are shown.*



99074201(44)

## \Other\Display calibre

*The calibre is displayed together with the measurement in the upper left corner of the target window. If the calibre is written inside round brackets, then in addition this means that the score is calculated as centre score. The advantage of score methods with central score is that they are independent of the calibre.*

### Off

*The calibre information is suppressed.*



99078300(66)

### On (Default)

*The calibre information is displayed.*



99078301(63)

## \Other\Indication

*There are situations in which the firer should not be informed about the shot which has been fired. If the screen is switched off, then the shot situation is not relayed. No entry is made in the list window and no printout is produced. Only the shot number is displayed in the shot window.*

### Off

*All displays (graphics window, list window, shot window and printer) are suppressed. The shot information is visible only on an associated PC and in the log. The function is used when statistical measurements need to be made and the firer must not be influenced by the result.*



09907260(87)

### On (Default)

*Images are no longer suppressed.*



09907261(84)

## Parameter

*Parameters are optional functions that can be turned on if desired. Parameters can be set in many ways. There are parameters that affect the image, parameters that calculate statistical values, and many more. Parameters must be switched on before a particular program is input.*

### MPI

*The MPI (mean point of impact) calculates the mean point of impact of the last five shots and indicates this spot as*



coordinates in the statistics window and as a small square in the target window. The number of shots that were included in the calculation of the MPI can also optionally be displayed in the statistics window.

## \MPI\Text

The text readout in the statistics window can be suppressed.

### Off

Only the small square on the site of the mean hit point is indicated. The text readout in the statistics window is suppressed.



99079500(55)

### On (Default)

In addition to the graphic square in the statistics window a text with direction and place details is displayed via the MPI.



99079501(52)

## \MPI\MPI

The MPI can be turned on and off as a whole (graphics and text).

### Off

The MPI is not calculated.



99078100(84)

### On (Default)

The MPI is calculated.



99078101(81)

## Simulator SCB

The SCB parameter (scoreboard) simulates the details of a scoreboard in the statistics window.

### Off

The SCB is not copied.



99080100(01)

### On (Default)

The scoreboard is replicated in the statistics window.



99080101(95)

## Divisions

The divider is a score method which is used above all in Germany. It shows the distance of the point of entry of a shot from the centre of the target in 1/10 millimetre. The goal of a firer is to achieve the lowest possible number of dividers. The divider exists as a parameter and is displayed in the statistics window. In addition the divider values of all shots in one program are added up. The divider can be chosen as a score method in free series. In this way it is possible to select the divider as a primary or secondary score.

### Off (Default)

The divider parameter in the statistics window is turned off.



99079300(73)

### On

The divider parameter in the statistics window is turned on.



99079301(70)

## Fi

The parameter Fi indicates the distance between the shots which are furthest apart in a group in the statistics window.

### Off (Default)

The parameter Fi is not calculated.



99079100(91)

### On

The parameter Fi is calculated.



99079101(88)



---

## FiFi

The parameter FiFi indicates the distance between the shots which are furthest apart in an entire program in the statistics window. With very large numbers of shots, this parameter is very calculation intensive and the operating rate of the control unit can become noticeably slower.

### Off (Default)

The parameter FiFi is not calculated.



99079200(82)

### On

The parameter FiFi is calculated.



99079201(79)

---

## Biathlon

### Off (Default)



99079000(03)

### On



99079001(97)

---

## Spread

The distance between those shots which lie furthest apart horizontally is calculated and displayed in the statistics window. The distance between those shots which lie furthest apart vertically is similarly calculated and displayed.

### Off (Default)

The X and Y ranges are not calculated.



99080000(10)

### On

The X and Y ranges are calculated.



99080001(07)

---

## Language

The control unit supports several languages. The language of the user guidance can be individually adjusted.

### English (Default)

The menu operation is displayed in English.



99070200(19)

### Deutsch

The menu operation is displayed in German.



99070201(16)

---

## Language

The control unit supports several languages. The language of the user guidance can be individually adjusted.

### English (Default)

The menu operation is displayed in English.



99070200(19)

### Deutsch

The menu operation is displayed in German.



99070201(16)

### Francais

The menu operation is displayed in French.



99070202(13)

### Español

The menu operation is displayed in Spanish.



99070207(95)

### Dansk

The menu operation is displayed in Danish.



99070204(07)



Norsk  
*The menu operation is displayed in Norwegian.*



99070205(04)

Svenska  
*The menu operation is displayed in Swedish.*



99070206(01)

Italiano  
*The menu operation is displayed in Italian.*



99070203(10)

Russian



99070208(92)

## Time

*The clock time that is shown in the title bar can be set and the form of the representation can be changed.*

### Adjust Clock

*The clock time can be set on every control unit. If several control units are connected together over a LON network, then every adjustment to the time will be relayed to all the control units. At best the time on the control unit is always synchronised with the lowest subnet number. The control unit with the lowest subnet number is therefore automatically responsible for ensuring that all the connected devices are synchronised. To ensure correct score of shots, above all when shooting takes place with a shot logoff, the correct clock time on all devices is most important.*

Year minus 1  
*One year will be subtracted from the year set now.*



99063100(76)

Year plus 1  
*One year is added to the year that is set now.*



99063101(73)

Month minus 1  
*One month will be subtracted from the month set now.*



99063102(70)

Month plus 1  
*One month is added to the month that is set now.*



99063103(67)

Day minus 1  
*One day will be subtracted from the day set now.*



99063104(64)

Day plus 1  
*One day will be added to the day set now.*



99063105(61)

Hour minus 1  
*One hour will be subtracted from the hour set now.*



99063106(58)

Hour plus 1  
*One hour is added to the hour that is set now.*



99063107(55)

Minute minus 1  
*One minute will be subtracted from the minute set now.*



99063108(52)

Minute plus 1  
*One minute is added to the minute that is set now.*



99063109(49)



### Set second zero

*The selected minute starts afresh.*



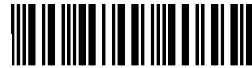
99063110(46)

## Date format

*The date format can be adjusted according to the circumstances of the country.*

### Short format

*The date in short format looks for example like this:  
27.09 17:32*



99076900(95)

### European (Default)

*The date in 'European' format looks for example like this: 27.09.2004 17:32*



99076901(92)

### European with Seconds

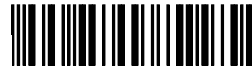
*The date in 'European plus seconds' format looks for example like this: 27.09.2004 17:32:15*



99076902(89)

### US

*The date in 'US' format looks for example like this:  
09/27/2004 17:32*



99076903(86)

### US+Seconds

*The date in 'US plus seconds' format looks for example like this: 09/27/2004 17:32:15*



99076904(83)

## Other

*The directory 'Other\Settings' contains all settings that cannot be unequivocally classified in any other category.*

### Start

*Start settings concern the system startup (switching on) on the one hand, and variations in program start settings on the other hand.*

### \Start\Enable Repeat

*After a program has been shot the control menu changes automatically. When the status changes to 'Stop', a new button 'Repeat' appears. There are occasions when a firer may shoot a program only once. In this case the permission for 'Repeat' must be denied.*

#### Off

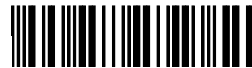
*The function 'Repeat' is barred.*



99077100(77)

#### On (Default)

*The function 'Repeat' is permitted.*



99077101(74)

### \Start\Free series start setting

*Free series are represented in the practice progress window with three open groups. The method of operation of the free series is described in the user manual. The start setting defines which of the three groups should be started.*

#### Sighters (Default)

*Every free series starts with the test group. In the practice progress window the test group T is on a white background.*



99079400(64)

#### Shot by Shot

*Alternatively a free series can also be started directly with the open single group S-.*



99079401(61)



---

## \Start\Startup program

*If a program has been selected this can be saved as a start-up program. The control unit will then in future automatically load the start-up program as long as no rebuild has been launched. User programs cannot be consigned as start-up programs. If the start-up program is saved after a user program has been loaded, in future the control unit will start up with a free series but with the right target.*

### Clear

*If an autostart program has been saved, then this setting is erased. In future the control unit will not automatically select any program when turned on.*



990798000000(58)

### Save

*The program that has currently been chosen will load automatically in future when the control unit is turned on.*



990798065535(72)

---

## \Start\SC-Programs

### \Start\SC-Programs\Single Execution

#### Off (Default)



99081100(08)

#### On



99081101(05)

---

## \Start\Scale Factor

*In some situations targets have to be scaled because of shooting range reasons. For creating comparable shooting programs it is possible to resize targets in that way that other distances may be simulated. For example a 300 Meter target was resized to 2/3 to use it at 200 Meter distance. Scale Factor can now be set to 667 for using the original 300 meter target from the catalogue but shooting on smaller, nearer target on 200 meter.*

### Reset

*Resets the scale factor to its standard value.*



9908101000(58)

### Scale Factor (600)



9908100600(94)

### Set Scale Factor

*Starts an editor for having the scale factor entered. Its value has to be between 100 and 9999 where 1000 is the standard value.*



99064700(29)

---

## \Start\Target Alternative

*Setting for special variants of programs.*

### Default

*Default*



99080900(26)

### Right

*Used for Moving Mosse Exercise starting on right side instead of left side.*



99080901(23)

---

## \Start\Enable Autoreset

*Under certain conditions the resources of the control unit can become limited. This affects mainly the on hand working memory, its fragmentation and the working speed of the control unit. If certain limits are exceeded, the control unit can restart by itself and thus fix the resource shortage. This only occurs when the status of the control unit has been on 'Stop' for a long time or if the screen saver is activated. In these situations the control unit starts up again automatically.*



Off

*The control unit may not be restarted automatically.*



99078400(57)

On (Default)

*The control unit may restart automatically under certain conditions.*



99078401(54)

---

Filter

*With many filters the menu can be shortened to those items which the user finds most essential. For instance if a certain distance is selected, all other distances and the programs associated with them can be suppressed. Thus so-called filter dimensions are created (user groups, distance, category etc.). A filter dimension contains several filter characteristics. The dimension 'User Group' comprises the characteristics Standard, Advanced, Administrator and Sius. A comprehensive description of the filter options can be found in the user manual.*

\Filter\Distance

*All the targets and programs were organised as a first priority by distance. Target images that are used exclusively for one distance are filed accordingly. The distance filter is the most effective filter.*

\Filter\Distance\Other

*Targets and programs that cannot be assigned unequivocally to one distance, or that are regularly used for various distances.*

Off (Default)

*The filter characteristic is deactivated.*



990635030400(49)

On

*The filter characteristic is activated.*



990635030401(46)

---

\Filter\Distance\10m

*Targets and programs that are employed for 10 metre distance.*

Off (Default)

*The filter characteristic is deactivated.*



990635030000(85)

On

*The filter characteristic is activated.*



990635030001(82)

---

\Filter\Distance\25m

*Targets and programs that are employed for 25 metre distance.*

Off (Default)

*The filter characteristic is deactivated.*



990635030100(76)

On

*The filter characteristic is activated.*



990635030101(73)

---

\Filter\Distance\50m

*Targets and programs that are employed for 50 metre distance.*

Off (Default)

*The filter characteristic is deactivated.*



990635030200(67)

On

*The filter characteristic is activated.*



990635030201(64)

---

\Filter\Distance\300m

*Targets and programs that are employed for 300 metre distance.*



---

Off (Default)

*The filter characteristic is deactivated.*



990635030300(58)

On

*The filter characteristic is activated.*



990635030301(55)

---

Reset

*Switch off all settings of this filter dimension and thereby deactivate filtering in this dimension.*



990635039902(61)

---

### \Filter\Category

*Programs and targets are grouped in second priority after categories. This was with the intention that programs or a target could be assigned as far as possible to the most widespread category. This means for example that the pistol target for 50 metres is to be found under ISSF, although this target is also frequently used in Switzerland. But ISSF is a more general category than Switzerland. Therefore this target image was stored under ISSF.*

### \Filter\Category\Other

*Programs or targets that do not fit into any other category.*

Off (Default)

*The filter characteristic is deactivated.*



990635010800(67)

On

*The filter characteristic is activated.*



990635010801(64)

---

### \Filter\Category\ISSF

*Targets and programs that are regulated by the ISSF.*

Off (Default)

*The filter characteristic is deactivated.*



990635010000(42)

On

*The filter characteristic is activated.*



990635010001(39)

---

### \Filter\Category\CISM

*Targets and programs that are regulated by the CISM.*

Off (Default)

*The filter characteristic is deactivated.*



990635010100(33)

On

*The filter characteristic is activated.*



990635010101(30)

---

### \Filter\Category\Hunting

*Targets and programs that are used exclusively as hunting targets or hunting programs.*

Off (Default)

*The filter characteristic is deactivated.*



990635010400(06)

On

*The filter characteristic is activated.*



990635010401(03)

---

### \Filter\Category\Belgium

*Targets and programs that are used almost exclusively in Belgium..*



Off (Default)

*The filter characteristic is deactivated.*



990635011000(49)

On

*The filter characteristic is activated.*



990635011001(46)

---

### \Filter\Category\Sui

*Targets and programs that are used almost exclusively in Switzerland.*

Off (Default)

*The filter characteristic is deactivated.*



990635010200(24)

On

*The filter characteristic is activated.*



990635010201(21)

---

### \Filter\Category\Scandinavia

*Targets and programs that are used almost exclusively in Scandinavia.*

Off (Default)

*The filter characteristic is deactivated.*



990635010300(15)

On

*The filter characteristic is activated.*



990635010301(12)

---

### \Filter\Category\Military

*The category Military forms a subcategory in various regions. For example in Scandinavia public shoots and military contests are common. With the category 'Military' the targets and programs that are used exclusively for public sport are excluded.*

Off (Default)

*The filter characteristic is deactivated.*



990635010900(58)

On

*The filter characteristic is activated.*



990635010901(55)

Reset

*Switch off all settings of this filter dimension and thereby deactivate filtering in this dimension.*



990635019902(18)

---

### \Filter\Weapon

*Certain types of weapons are only employed for certain distances. For example air pressure weapons are employed only for 10 metres and 25 metres, and pistols are not used for 300 metres. For a setup where exclusively pistols are to be shot, all rifle targets and rifle programs can be masked by the use of a filter.*

### \Filter\Weapon\Other

*All targets and programs that cannot be assigned to another weapon type.*

Off (Default)

*The filter characteristic is deactivated.*



990635050400(92)

On

*The filter characteristic is activated.*



990635050401(89)

---

### \Filter\Weapon\Rifle

*Targets and programs that are shot exclusively with rifles.*



Off (Default)

*The filter characteristic is deactivated.*



990635050000(31)

On

*The filter characteristic is activated.*



990635050001(28)

### \Filter\Weapon\Pistol

*Targets and programs that are shot exclusively with pistols.*

Off (Default)

*The filter characteristic is deactivated.*



990635050100(22)

On

*The filter characteristic is activated.*



990635050101(19)

### \Filter\Weapon\Air Rifle

*Targets and programs that are shot exclusively with air rifles.*

Off (Default)

*The filter characteristic is deactivated.*



990635050200(13)

On

*The filter characteristic is activated.*



990635050201(10)

### \Filter\Weapon\Air Pistol

*Targets and programs that are shot exclusively with air pistols.*

Off (Default)

*The filter characteristic is deactivated.*



990635050300(04)

On

*The filter characteristic is activated.*



990635050301(01)

Reset

*Switch off all settings of this filter dimension and thereby deactivate filtering in this dimension.*



990635059902(07)

### \Filter\User Group

*With the filter 'User Group' a simplified user authorisation can be adopted. Different levels of authority are assigned to the different user groups.*

#### \Filter\User Group\Standard

*A standard user can use only the normal shooting operation. He is forbidden to change settings or even to configure hardware components.*

Off (Default)

*The filter characteristic is deactivated.*



990635040000(58)

On

*The filter characteristic is activated.*



990635040001(55)

#### \Filter\User Group\Advanced

*An 'Advanced' user can amend the major settings and print out supplementary reports.*

Off (Default)

*The filter characteristic is deactivated.*



990635040100(49)



On

*The filter characteristic is activated.*



990635040101(46)

---

### \Filter\User Group\Administrator

*Maintenance tasks and hardware settings can only be amended if at least one administrator is configured.*

Off (Default)

*The filter characteristic is deactivated.*



990635040200(40)

On

*The filter characteristic is activated.*



990635040201(37)

---

### \Filter\User Group\Sius

*Special functions are reserved for Sius staff.*

Off (Default)

*The filter characteristic is deactivated.*



990635040300(31)

On

*The filter characteristic is activated.*



990635040301(28)

Reset

*Switch off all settings of this filter dimension and thereby deactivate filtering in this dimension.*



990635049902(34)

---

### \Filter\Function

*All the functions of the control unit were organised in function groups. By filtering individual function group the fields which are not needed can be masked.*

#### \Filter\Function\Other

*Functions which cannot be assigned to another function group.*

Off (Default)

*The filter characteristic is deactivated.*



990635020200(94)

On

*The filter characteristic is activated.*



990635020201(91)

---

#### \Filter\Function\Logon

*Functions which are needed for the identification of firer.*

Off (Default)

*The filter characteristic is deactivated.*



990635020000(15)

On

*The filter characteristic is activated.*



990635020001(12)

---

#### \Filter\Function\Free Series

*Functions which are needed only in free series.*

Off (Default)

*The filter characteristic is deactivated.*



990635020100(06)

On

*The filter characteristic is activated.*



990635020101(03)



### \Filter\Function\Programs

*Functions which are needed only in free series.*

#### Off (Default)

*The filter characteristic is deactivated.*



990635020300(85)

#### On

*The filter characteristic is activated.*



990635020301(82)

### \Filter\Function\Firer number

*When only the function 'Firer number' is permitted, but not the function 'Report', then the firer number can be retrieved but the other information about position, weapon, sight etc. remains invisible.*

#### Off (Default)

*The filter characteristic is deactivated.*



990635020400(76)

#### On

*The filter characteristic is activated.*



990635020401(73)

#### Reset

*Switch off all settings of this filter dimension and thereby deactivate filtering in this dimension.*



990635029902(88)

### \Filter\Mode

*In contrast to the other settings, the Mode does not filter any menu functions. In previous Sius systems the mode was urgently needed so that the correct detection system would be recognised. In the control unit this information is no longer necessary. But the mode can be used as before as a lock. Every target and every program identify a particular mode. A group can only be loaded when the filter Mode is set to 'Off' or when the program mode corresponds to the set mode. This lock also functions when the target or the program are entered via barcodes. If for example the mode '300m' is selected, no further hunting images can be selected. The control unit always issues an appropriate error warning in the list window.*

#### Off (Default)

*All the programs can be selected.*



99071899(63)

#### Air pressure weapons

*Shooting mode for air pressure weapons and programs that are shot over a 10 metre distance. (Mode 2)*



99071802(63)

#### 25m

*Mode for 25 metre and 50 metre small calibre and large calibre pistols as well as for small calibre rifles. (Mode 3)*



99071803(60)

#### 50m

*Targets and programs that are shot from 50 metres. This concerns large and small calibre pistols and small calibre rifles as well as special Swiss groups (Morgarten). (Mode 4)*



99071804(57)

#### 300m

*Targets and programs for 300 metre disciplines (Mode 0)*



99071800(69)

#### Hunting

*Hunting targets and hunting programs (Mode 1)*



99071801(66)



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**Scandinavia**

Scandinavian targets (Denmark, Norway, Sweden)  
(Mode 11)

**Running Target**

Targets and programs for the running target for 10  
and 50 metres (Mode 12)

**Biathlon**

Targets and programs for biathlon disciplines (Mode  
13)



---

**Calibre**

With most targets and programs a certain calibre is implicitly assumed. With targets that are well known to be fired at with different weapons types and thus with different calibres, the most common selection options are already available. The calibre is used on the one hand for the image in the graphics window, and on the other hand certain score methods require the calibre to calculate the score. In the modern ISSF disciplines the score is calculated by means of the shot hole centre (centre score). The calibre is fixed (e.g. air pressure disciplines 4.5mm.) Even when a larger calibre is employed, these disciplines are evaluated with the calibre that was fixed. Such score methods are identified in the target window with the note 'centre score'. With older targets that are evaluated with edge score, the selected calibre has an effect on the score. Changes to this setting are therefore logged.

**\Calibre\Use Always****On****Off (Default)**

---

**Off**

All disciplines that are not assessed with a fixed  
given calibre are assessed with centre score.

**450**

All disciplines that are not assessed with a fixed  
given calibre or with centre score are assessed with  
4.5mm calibre.

**560**

All disciplines that are not assessed with a fixed  
given calibre or with centre score are assessed with  
5.6mm calibre.

**800**

All disciplines that are not assessed with a fixed  
given calibre or with centre score are assessed with  
8.0mm calibre.

**900**

All disciplines that are not assessed with a fixed  
given calibre or with centre score are assessed with  
9.0mm calibre.

**965**

All disciplines that are not assessed with a fixed  
given calibre or with centre score are assessed with  
9.65mm calibre.





1158



990796001158(44)

1270



990796001270(96)

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## Control Mode

*The control mode regulates various stages of the remote control. The control unit is configured so that for example it can be controlled remotely by Siusdata ®.*

### Local (Default)

*All functions can be carried out via the keyboard or the barcode reader.*



09907790(49)

### Practice Control

*In certain ISSF disciplines (e.g. 3\*40 rifle shoot) the control unit goes into a paused state. This state can be released with a command from SiusData ®. In this way a change of position can be ordered for a whole score.*



09907791(46)

### Remote

*If the control unit is totally remotely controlled, entries via the keyboard or the barcode reader are barred.*



09907792(43)

---

## Demo

*The demo mode is displayed in the status window (small font). In demo mode shots can be created via the insert key ('Ins'). The control unit requests the connected target to create a shot at a chance coordinate and to send this back to the control unit. The demo shot implicitly tests both the connected target and the communication. Demo mode is switched off every time at startup.*

### Off (Default)

*Turns off the demo mode.*



09907000(91)

### On

*Selects demo mode.*



09907001(88)

---

### Activate remote barcode

*This command sets the CU in the remote barcode mode. While activated all Barcodes from the connected Barcodereader will be sent to the specified Lane. To change the selected lane press the specified keys on the keyboard, to exit remotebarcode mode press escape. The configuration of the key-lane selection can be downloaded from siusdata, default setting is*



099067(07)

### Demonstration Mode



099068(04)

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## Settings Control

*It is possible to store one's own setting configurations in the permanent memory of a control unit. These customer settings will not be lost even with a change of battery. Even during a 'cold start' these settings will not be overwritten by the factory settings. So it can be guaranteed that your own settings can also be selected as standard. The settings will only be lost if a new software version is loaded. It is possible to save these settings as a file on a computer and with SiusData to load them via the LON network onto all connected control units. Warm start: A warm start is triggered by a short power failure or by the explicit command 'Maintenance\Warm-Start'. The current settings are preserved during a warm start. Cold start: A cold start can be forced if during boot-up the cold start button is pressed (above the two 1mm drillholes on the back of the control unit, on the right near the control unit socket). The control unit confirms the cold start*



with a beep. A cold start is also necessary if the memory content is lost due to too little battery power during an electricity failure. The control unit announces this process with the message 'crc-Failed'. In a cold start the user settings that were most recently saved are always loaded. The devices are supplied with various user settings. In particular the filters are preconfigured for the customer.

## Factory Settings

With the command 'Factory Settings' all settings in the volatile memory are reset to the factory settings. The customer settings are stored. In the event of a system 'cold start' the customer settings are also reloaded with this command. In order for the factory settings to be selected as the standard settings after a 'cold start', they must be saved as customer settings following this command.



09903601(06)

## Customer Settings

All settings that were changed during the current operation are reset to the customer settings. The same occurs if a cold start takes place on the control unit, or if the buffer battery is changed.



09903612(70)

## Save Customer Settings

The settings in current use are saved as customer settings. This process writes data from the volatile memory into the non-volatile memory. The process only lasts a few seconds but it is very important that it is carried out completely as otherwise the control unit can be damaged. If the process is not carried out completely, it can happen that the control unit will no longer start after the next interruption to the power supply. In this event the software would have to be reinstalled. The control unit must not be switched off during the memory process. The power supply must not be interrupted. The conclusion of the memory process is signalled with a beep.



09903613(67)

## Maintenance

The directory 'Maintenance' contains functions which go beyond daily use. Diagnosis, upkeep and error searches are supported through various start points. These functions should be carried out only by well trained staff.

## Reports

Expanded reports are listed under 'Maintenance\Reports'. Also kept here are the functions which are available for erasing the data belonging to these reports and so to set the corresponding report to zero. For example the log can be deleted or the software shot counter can be reset to zero.

## Settings

Printing out settings:

### Print

Prints out a list of the current settings that differ from the factory settings. In addition the shaft settings of the target images and the filter configurations are listed, insofar as these differ from the factory settings.



09903602(03)

### Shoot

Many settings are taken over into a program when the program is launched. Additionally a program use of additional settings that were stored when the program was being developed. The command 'Settings\Program' prints all the settings of the actively selected program.



09903610(76)



## Shot Counter

### Mechanical shot counters:

The optional mechanical shot counter only counts the shots on your own target. It cannot be reset. Demo shots or inserted no scores are not counted. A detailed description of the whole function can be found in the user manual under 'Mechanical shot counters'.

### Software shot counters:

The software shot counter counts shots in different categories. Own shots, cross shots, missed shots, demo shots etc. are differentiated and displayed separately. The shot count report is displayed in the list window and provided a printer is connected and switched on, is printed out. The shot counters are connected to the control units. If the settings are reset to factory settings, the shot counts are also reset to zero. The same occurs when the battery has to be changed. With a normal interruption to the power supply, the values are not lost. The software shot counters can also be reset independently of the settings under 'Maintenance\Reports\Shot Counters'.

### Reset Shot Counter

Resets the software shot counter back to zero.



09903609(79)

## Invalid shots

Non-allowable shots (shots during the Stop, Pause or the Show Phase and cross shots) are not only counted, they are kept in the control unit as pending and can be queried at any time. The shots are then shown with the time and if possible with the score. With a warm start or with the command 'Erase' under 'Maintenance\Invalid Shots' the report can be rejected. The shots remain in the log throughout and furthermore can be documented in a log printout.

### Clear

The report on the latest cross shots and illegal shots is erased.



990560(12)

## Log

Events that are of relevance for the duration of a program are filed in the memory (events memory, log). This information is needed to be able to reproduce a program after a power interruption. The CU931 investigates this data at every system start-up. If it is established that the last program to be shot was not correctly ended, then a repetition process is introduced. By means of the log past programs can also be reloaded or a copy can be printed once again. The log is stored in the volatile memory of the control unit, which is buffered with a battery. The data is protected from misinterpretation by a check sum. If the check sum is not correct at system start-up, for example due to a faulty battery, the log is initialised again. The control unit communicates this by a triple beep and a report in the list window. The log is restricted in memory size. In the event of an overload, the oldest events are overwritten by the most recent on a rolling basis. Typically more than ten programs can be stored in the log. The log can also be manually erased under 'Maintenance\Reports\Log'. The format of the printout is described in the user manual.

### Clear

The log memory is explicitly wiped. Because this means that previous programs are irretrievably erased, this command must be authorised by a further confirmation.

### Confirm



099057(37)

### Log Hex

The 'Log-Hex' is an expanded log printout which prints out all events additionally in hexadecimal form. This printout allows events to be analysed at a very detailed level. The printout is exclusively used to search for software errors.



990559(15)

## Debug

With the 'Debug' reports internal conditions of the control unit can be displayed. This report permits a diagnosis of the control unit in respect of the demand, the speed of operation or the load. They serve to enable the speed and reliability of the devices to be optimised.

### Report Processes

Reports the number of runs as well as the time taken by the individual processes.



09903611(73)



## Classes

*Prints a report that indicates for each class how many instances are presently available, how often the designer has been contacted and how high the greatest occurrence of the class was in the past.*



09903605(91)

---

## Self Test

*Hardware components can be tested by some special commands. These tests are normally used to fulfill the final check of a new installation.*

*They can be used to filter an erroneous function while the system is running.*

### Shot Counter

*The mechanical shot counter can be made to start counting by a self test. The chosen number triggers the corresponding number of counting pulses. Thus the fastest possible meter pulse rate can be selected. The mechanical counter cannot skip any of these pulses.*

1

*Counting impulse(s) on the mechanical shot counters*



99035121(11)

2

*Counting impulse(s) on the mechanical shot counters*



99035122(08)

3

*Counting impulse(s) on the mechanical shot counters*



99035123(05)

4

*Counting impulse(s) on the mechanical shot counters*



99035124(02)

5

*Counting impulse(s) on the mechanical shot counters*



99035125(96)

6

*Counting impulse(s) on the mechanical shot counters*



99035126(93)

7

*Counting impulse(s) on the mechanical shot counters*



99035127(90)

8

*Counting impulse(s) on the mechanical shot counters*



99035128(87)

9

*Counting impulse(s) on the mechanical shot counters*



99035129(84)

---

### Target test

*The target test requests the most important status information from the LON electronic measuring system. Along with the software and hardware version, the temperature, the assembly alignment and the Target Index Code are conveyed. The running time of the enquiry indirectly provides information on how well synchronised the equipment is with respect to time. The target test can be used to test the network cabling to the LON electronic measuring system and the functioning of the communication chips on the control unit and the LON electronic measuring system. The target test only functions if a LON electronic measuring system is connected and linked to the control unit via the*



99063300(58)



correct subnet (please refer to  
'Hardware\Target\Connections').

## Keyboard

The keyboard test switches the control unit into a special keyboard test mode. Every keystroke is confirmed by an entry in the list window. Hitting the Escape key permits this keyboard test to be exited.



09903505(03)

## Scoreboard

The scoreboard itself has a test program available. This test program can be started from the control unit on its own scoreboard (subnet Addressing must be in agreement).



09903508(91)

## Beep

The beep test issues a series of ten short beeps one after another. They must be acoustically audible from the control unit.



09903511(82)

## Control unit reset

With a warm start the control unit is forced to start up again (reboot process). This corresponds to the same process as when the control unit is turned on without power for a short time. (see also 'Settings\Setting controls')

### Confirm



09903600(09)

## Debug

Functions that serve only for error detection are stored under 'Maintenance\Debug'.

### Debug Mode

The debug mode allows all events which are being processed in the control unit also to be represented visually. This representation permits a precise search for errors. In the case of reproducible error, it can happen that you will be instructed by Sius colleagues to turn on this debug mode, so that the printout can subsequently be analysed and the error can thereby be controlled.

#### Off (Default)

The events processed by the control unit are not displayed.



99070700(71)

#### On

The events processed by the control unit are displayed in the list window.



99070701(68)

#### Print

The events processed by the control unit are displayed in the list window and additionally on the connected printer.



99070702(65)

## Trap

This function is only used for errors that are very difficult to reproduce. In the software versions that are specially produced for this, an 'error case' can be programmed in. At the moment when the error is recognised, a special response can be triggered. Mostly the debug mode is activated as a special treatment.

#### Off (Default)

The control unit operates without special error recognition.



99078200(75)

#### On

The special treatment is activated.



99078201(72)



## Hardware

Settings that directly affect the hardware components of the control unit are stored under 'Hardware'. Some of these components are optionally available for the equipment and only have an effect when these components are running.

### SCB

#### SCB

Communication to the scoreboard can be basically suppressed. Communication reduces the speed of execution of the control unit by several percent. It is therefore worthwhile to configure the SCB as 'Off' when it is not present. Communication to the SCB must be switched on before a program is loaded.

##### Off (Default)

The SCB is not responded to.



99078900(12)

##### On

The SCB is responded to.



99078901(09)

## Control unit

'Screen' contains several hardware settings that directly affect the control unit.

### Set Subnet

Sius AG devices communicate with one another via the field bus LON. Each device has its own address. One part of this address is the so-called subnet. The LON electronic measuring system and the control unit with the same subnet always belong together. Different lanes must be correspondingly differentiated in the subnet. Every LON electronic measuring system sends its own detected shots to the control unit in the same subnet in which it is itself addressed. A LON electronic measuring system with subnet 5 sends its shots to the control unit with subnet 5. By setting a subnet on a control unit only the address of the control unit is affected. A previously linked LON electronic measuring system must be reconnected after this alteration (please refer to 'Hardware\Target\Connect' and instructions for use.

Insofar as a LON electronic measuring system is located in the same subnet, the status of the control unit changes from 'Offline' to 'Stop' or 'Ready' according to whether a program is selected or not.

The subnet can be selected via the 10-er keyboard. Pressing the Enter key confirms a given value. With 'Esc' the entry can be cancelled. The F5 key allows incorrect entries to be corrected in time.

#### \Set Subnet\1..9

##### 1 (Default)



9907270001(58)

##### 2



9907270002(55)

##### 3



9907270003(52)

##### 4



9907270004(49)

##### 5



9907270005(46)

##### 6



9907270006(43)

##### 7



9907270007(40)



8



9907270008(37)

9



9907270009(34)

---

\Set Subnet\10..19

10



9907270010(31)

11



9907270011(28)

12



9907270012(25)

13



9907270013(22)

14



9907270014(19)

15



9907270015(16)

16



9907270016(13)

17



9907270017(10)

18



9907270018(07)

19



9907270019(04)

---

\Set Subnet\20..29

20



9907270020(01)

21



9907270021(95)

22



9907270022(92)

23



9907270023(89)



24



9907270024(86)

25



9907270025(83)

26



9907270026(80)

27



9907270027(77)

28



9907270028(74)

29



9907270029(71)

---

\Set Subnet\30..39

30



9907270030(68)

31



9907270031(65)

32



9907270032(62)

33



9907270033(59)

34



9907270034(56)

35



9907270035(53)

36



9907270036(50)

37



9907270037(47)

38



9907270038(44)

39



9907270039(41)

---

\Set Subnet\40..49



40



9907270040(38)

41



9907270041(35)

42



9907270042(32)

43



9907270043(29)

44



9907270044(26)

45



9907270045(23)

46



9907270046(20)

47



9907270047(17)

48



9907270048(14)

49



9907270049(11)

\Set Subnet\50..59

50



9907270050(08)

51



9907270051(05)

52



9907270052(02)

53



9907270053(96)

54



9907270054(93)

55



9907270055(90)

56



9907270056(87)



57



9907270057(84)

58



9907270058(81)

59



9907270059(78)

---

\Set Subnet\60..69

60



9907270060(75)

61



9907270061(72)

62



9907270062(69)

63



9907270063(66)

64



9907270064(63)

65



9907270065(60)

66



9907270066(57)

67



9907270067(54)

68



9907270068(51)

69



9907270069(48)

---

\Set Subnet\70..79

70



9907270070(45)

71



9907270071(42)

72



9907270072(39)



---

|    |                    |
|----|--------------------|
| 73 | <br>9907270073(36) |
| 74 | <br>9907270074(33) |
| 75 | <br>9907270075(30) |
| 76 | <br>9907270076(27) |
| 77 | <br>9907270077(24) |
| 78 | <br>9907270078(21) |
| 79 | <br>9907270079(18) |

---

\Set Subnet\80..89

|    |                    |
|----|--------------------|
| 80 | <br>9907270080(15) |
| 81 | <br>9907270081(12) |
| 82 | <br>9907270082(09) |
| 83 | <br>9907270083(06) |
| 84 | <br>9907270084(03) |
| 85 | <br>9907270085(97) |
| 86 | <br>9907270086(94) |
| 87 | <br>9907270087(91) |
| 88 | <br>9907270088(88) |
| 89 | <br>9907270089(85) |



---

\Set Subnet\90..99

90



91



92



93



94



95



96



97



98



99



---

DeltaX

*The absolute point of entry can be shifted in the horizontal direction. This can be used to compensate for assembly inaccuracies.*

X-0.1mm  
to the left



X+0.1mm  
to the right



X-1mm  
to the left



X+1mm  
to the right



X-10mm  
to the left



X+10mm  
to the right





## DeltaY

*The absolute point of entry can be shifted in the vertical direction. This can be used to compensate for assembly inaccuracies.*

Y-0.1mm  
downwards



99072900(67)

Y+0.1mm  
upwards



99072901(64)

Y-1mm  
downwards



99072902(61)

Y+1mm  
upwards



99072903(58)

Y-10mm  
downwards



99072904(55)

Y+10mm  
upwards



99072905(52)

## Menu

*The keyboard menu can be switched off. This is especially helpful when the configuration is to be used only via the barcode reader. The barcode reader offers the advantage that the commands and programs permitted for the user can be compiled on one sheet of paper.*

Off

*The keyboard menu is suppressed. Use of the equipment is possible only via a barcode reader or a central computer.*



99078000(93)

On (Default)

*The keyboard menu is switched on again. If the menu is switched off, it can no longer be switched on via the keyboard. Normally it must be switched on again by a barcode, from a central computer or by means of a cold start. A further possibility is to switch the menu on again by the code '282806'. The code must be entered in one go on the transparency keyboard. For this reason it should be made available only to experienced persons.*



99078001(90)

## Keystroke

Escape



9906442001(82)

Opt



9906442002(79)

Help



9906442003(76)

Next Window



9906442004(73)



|           |                                                                                                        |
|-----------|--------------------------------------------------------------------------------------------------------|
| Enter     | <br>9906442005(70)   |
| Zoom      | <br>9906442006(67)   |
| Menu      | <br>9906442007(64)   |
| Match     | <br>9906442008(61)   |
| Backspace | <br>9906442009(58)   |
| F1        | <br>9906441001(75)   |
| F2        | <br>9906441002(72)   |
| F3        | <br>9906441003(69) |
| F4        | <br>9906441004(66) |
| F5        | <br>9906441005(63) |
| Right     | <br>9906443001(89) |
| Up        | <br>9906443002(86) |
| Left      | <br>9906443003(83) |
| Down      | <br>9906443004(80) |
| Home      | <br>9906443005(77) |
| End       | <br>9906443006(74) |
| Page Up   | <br>9906443007(71) |



Page Down



9906443008(68)

Insert



9906443009(65)

0 (Default)



9906440000(71)

1



9906440001(68)

2



9906440002(65)

3



9906440003(62)

4



9906440004(59)

5



9906440005(56)

6



9906440006(53)

7



9906440007(50)

8



9906440008(47)

9



9906440009(44)

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#### Set Subnet

*Sius AG devices communicate with one another via the field bus LON. Each device has its own address. One part of this address is the so-called subnet. The LON electronic measuring system and the control unit with the same subnet always belong together. Different lanes must be correspondingly differentiated in the subnet. Every LON electronic measuring system sends its own detected shots to the control unit in the same subnet in which it is itself addressed. A LON electronic measuring system with subnet 5 sends its shots to the control unit with subnet 5.*

*By setting a subnet on a control unit only the address of the control unit is affected. A previously linked LON electronic measuring system must be reconnected after this alteration (please refer to 'Hardware\Target\Connect' and instructions for use. Insofar as a LON electronic measuring system is located in the same subnet, the status of the control unit changes from 'Offline' to 'Stop' or 'Ready'*



99064000(92)



according to whether a program is selected or not.  
The subnet can be selected via the 10-er keyboard.  
Pressing the Enter key confirms a given value. With  
'Esc' the entry can be cancelled. The F5 key allows  
incorrect entries to be corrected in time.

## RC92

Optionally a RC92 (shoot box) can be connected to a control unit. The RC92 is controlled by means of three buttons (Zoom, Menu and Shoot).

### Match Menu

Via the Menu button an additional window can be opened on the screen. This window lists all the functions available in the Control Menu. In this way the control unit can be remotely controlled by the firer without having to leave his position.

In official ISSF contests the firer is not permitted to carry out these functions himself. It must therefore be possible to switch off the Shoot Menu.

#### Off

The match menu is switched off. The Match button on the RC92 has no function.



99079900(19)

#### On

The match menu is switched on.



99079901(16)

#### Short format

Only a reduced number of functions is available (Clear Graphics).



99079902(13)

## Target

Settings that must be communicated to the LON electronic measuring system are stored under 'Target'. These settings are also frequently dependent on the program selected and therefore can be overwritten if necessary.

### Target changer

Some detection systems are quipped with a target changer (S101, S310). Each target image has been programmed with a basic setting or a shaft. If a program with a specific target is selected, the preselected shaft is automatically activated. If the detection system is not equipped with a changing mechanism, the command is ignored. If the target image is mounted in a different shaft or if the target image on the control unit does not correspond to the physical target image, the shaft can be changed by means of the target changer commands. The target image is hereby automatically programmed for the new choice of shaft. If the same program is selected again later, the latest shaft to be selected will again be selected in any case.

#### A (Default)

The 'shaft' A corresponds to the fixed frame of the detection system.



09907190(06)

#### B

The shaft B is the alternative frame.



09907191(03)

#### C

With the target S101 there are two alternative frames available. The shaft C is the second alternative frame.



09907192(97)

## Sensitivity

The detection systems are fitted with various amplifier settings for the microphone. For most systems and weapons a low sensitivity is the correct setting. In the 25 metre rapid fire pistols with a very small recoil are used. The speed of the projectile is correspondingly small and the impact on the rubber very light. For these disciplines a high sensitivity is necessary so that the shot can always be correctly picked up. But the setting must be set to high only in these disciplines because with other firearms otherwise crosstalk onto neighbouring lines could ensue. The setting is normally correctly adjusted for the programs and must not be adjusted manually.

\Sensitivity\Use Always



On



99072099(45)

Off (Default)



99072098(48)

Low (Default)

*Low sensitivity is required for most bullets.*



09907200(73)

High

*High sensitivity is needed above all for sport shooting (25m), which is shot with high recoil weapons, typically on targets S10 and S25/50*



09907201(70)

## Paper feed

*After every shot, detection systems controlling a materials handling unit (paper or rubber tape) trigger an automatic feed unit. The feed unit is measured in millimetres. Depending on the discipline and the weapon, the tape must be fed a greater or lesser distance. These distances are laid down in the target images. But every discipline can define its own actual setting values. The tape feed for a 10 metre discipline is 20 millimetres. In ISSF finals the feed distance is increased to 30 millimetres. The tape feed can be changed after a program has been selected.*

### \Paper feed\Use Always

On



99077899(08)

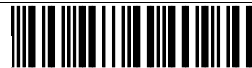
Off (Default)



99077898(11)

0

*mm*



99077800(14)

1

*mm*



99077801(11)

2

*mm*



99077802(08)

3

*mm*



99077803(05)

4

*mm*



99077804(02)

5

*mm*



99077805(96)

10

*mm*



99077810(81)

20 (Default)

*mm*



99077820(51)



30  
mm



99077830(21)

40  
mm



99077840(88)

50  
mm



99077850(58)

---

#### Connect

*This barcode switches the control unit over to a special configuration mode. The control unit waits for a service PIN message from any LON electronic measuring system. This message can be created on the LON electronic measuring system, either when the service PIN is pressed or when shooting takes place. But a shot triggers a Service PIN message only if the LON electronic measuring system was not previously configured. Every LON electronic measuring system that first reports this Service PIN message is reprogrammed by the control unit to its own subnet address. This function is used only if the LON electronic measuring system does not have its own LNR (lane number box).*



99063200(67)

#### Distance Index

0 (Default)



99081200(96)

1



99081201(93)

2



99081202(90)

3



99081203(87)

4



99081204(84)

---

#### Time Control Unit

##### Time Control Unit

Off (Default)



99080300(80)

On



99080301(77)

---

#### Duel mode



Off (Default)



99080400(71)

On



99080401(68)

## Graphic Printer Model

Undefined Printer (Default)



99080500(62)

D931-SP



99080501(59)

D931



99080502(56)

iDP3240



99080503(53)

## Shot sensor

*The shot sensor allows cross shots and no scores to be detected. Without the shot sensor all shots are interpreted as own shots on the own target. Even a shot from a neighbouring lane onto the own target is interpreted as an own shot and included in the calculation of the results. With the shot sensor, within a certain timescale after the Shot Off signal the corresponding Shot On signal must be produced. If only a Shot Off signal is produced, the firer has not hit the target. The shot sensor can be connected to the control unit as an optional extra. At the moment when the control unit recognises the shot sensor, it switches this on automatically. If the shot sensor is removed, the control unit recognises this after a short period of time and automatically switches the shot sensor off again.*

Off

*On installations without a shot logoff, this setting will be switched off automatically. It is possible to switch off the shot logoff manually even though it is connected.*



09907010(61)

On (Default)

*The setting shot logoff ON is automatically cancelled if no shot logoff is connected.*



09907011(58)



## Logon

In order that the system can adhere to the necessary rules, under certain circumstances particular information about the firer and his weapon is needed. All this information can be recorded under the section 'Registration'.

### Info

#### Requirements

With set assumptions the system requires information about weapon, position and/or firer number before a group can be loaded. As long as this information is missing the group cannot be input.

##### Legalisation

If a legalisation unequal to 0 is chosen, then both the practice and the firer must produce the same legalisation in their codes in order for it to be authorised. The legalisation of the firer is however only active if the firer number is requested at the same time. This command is not to be confused with the command firer legalisation, under which the legalisation of the firer can explicitly be provided. Fact: the settings '\Requirements\Legalisation' and '\Register\Legalisation' must agree or one or other must be set to 0 in order that a program can be started and shooting can take place.

0 (Default)

No legalisation is required.



99077000(86)

1

Demanded legalisation



99077001(83)

2

Demanded legalisation



99077002(80)

3

Demanded legalisation



99077003(77)

4

Demanded legalisation



99077004(74)

5

Demanded legalisation



99077005(71)

6

Demanded legalisation



99077006(68)

7

Demanded legalisation



99077007(65)

8

Demanded legalisation



99077008(62)

9

Demanded legalisation



99077009(59)

##### Weapon required

In order that in contests it can be determined which program was shot with which weapon, it is possible to force the setting 'Position required'. Before a program can be loaded, a weapon type must be declared.

Off (Default)

Weapon identification is optional.



99077300(59)



On

*A weapon specification must be input before a program can be selected.*



99077301(56)

---

## Position required

*In order that in contests it can be determined which program was shot in which position, it is possible to force the setting 'Position required'. Before a program can be loaded, a position must be declared.*

Off (Default)

*Reporting of position is optional.*



99077200(68)

On

*A position report must be input before a program can be selected.*



99077201(65)

---

## Firer number required

*The firer number identifies the firer (see also 'Registering\Firer number').*

Off (Default)

*The firer number is optional.*



99077400(50)

On

*A firer number must be input before a program can be selected.*



99077401(47)

---

## Legalisation

*Legalisation can be loaded either individually or together with a firer number practice code. The firer must as a result input his firer number first (inclusive of legalisation) and then a program. Only when both legalisations agree, or one or other has a zero value, can the program be launched. Otherwise the screen gives the error message 'Wrong legalisation'. A firer in possession of the legalisation 0 in his practice code can shoot all programs, and a program that shows a legalisation 0 can be shot by all firers.*

0 (Default)

*Legalisation of the firer*



99077700(23)

1

*Legalisation of the firer*



99077701(20)

2

*Legalisation of the firer*



99077702(17)

3

*Legalisation of the firer*



99077703(14)

4

*Legalisation of the firer*



99077704(11)

5

*Legalisation of the firer*



99077705(08)

6

*Legalisation of the firer*



99077706(05)

7

*Legalisation of the firer*



99077707(02)



8  
Legalisation of the firer



99077708(96)

9  
Legalisation of the firer



99077709(93)

## Weapon Type

For the assessment of a contest, it can be important that the type of weapon used in a program that has been shot is known, for example if various rank listings are to be established for storm rifle 90 and storm rifle 57. In such a case the weapon type can be set. With the setting 'Requirements\Weapon type' the specification of a weapon type can be insisted upon before a program can be installed. Otherwise the program would be declined with a message 'weapon type needed'. The weapon type selected is displayed on the screen and on the paper printout.

Off (Default)



99076800(07)

Rifle



99076801(04)

Free Rifle



99076821(41)

Carbine



99076802(01)

Stgw 57



99076803(95)

Stgw 90



99076804(92)

Free Pistol



99076805(89)

Sport Pistol



99076806(86)

Sport Pistol Big Bore



99076807(83)

Sport Pistol Small Bore



99076808(80)

Ordinance pistol



99076809(77)

Ordinance pistol 75



99076810(74)

## Position

For the assessment of a contest, it can be important that the position in which shooting took place is known. In such a case the position can be input either on the menu or via a barcode. With the setting 'Requirements\Position' the specification of a position can be insisted upon before a program can be installed. The position selected is displayed on the screen and on the paper printout.



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Off (Default)



99077600(32)

Prone



99077601(29)

Prone supported



99077604(20)

Kneeling



99077603(23)

Standing



99077602(26)

---

Firer number



99063900(04)

*The firer number identifies the firer. The firer number can also be loaded via a barcode (Sius barcode inclusive of legalisation or SSV licence card) or via the keyboard. The firer number is transferred to the central processor. From the central processor the name of the firer can be construed from the firer number. The firer number is displayed on the screen and on the printer.*

*Should the setting 'Firer number needed' be activated and 'Repeat allowed' be switched off, then the firer number is erased after each program. This ensures that with this configuration before every program a firer number must be introduced.*



## Shortcuts

---

### 1

10 Moose

---

### 2

2x30 Rifle 2x30

---

### 3

3\*10 Air Rifle 3\*10

3\*10 Rifle 3\*10

3\*20 Standard Rifle 3\*20

3\*40 Free Rifle 3\*40

30 Rifle 30

---

### 5

5 Moose 5-5-4-3

---

### 6

60 Free Rifle 60

60 Rifle 60

600 Scale Factor (600)

---

## A

A1 MG Ziel A1

A10 Precision

A101 A10 100m

A102 A10 200m

A103 A10 300m

A10m Pistol A 10m

A10m Rifle A 10m vertical

A2 MG Ziel A2

A20m Rifle A 20m vertical

A3 MG Ziel A3

A4 MG Ziel A4

A5 MG Ziel A5

A-5m Pistol A 5m

A6 MG Ziel A6

A7 MG Ziel A7

A8 MG Ziel A8

Abtr Abort

Act MPI

Act SCB

AdjC Adjust Clock

Admn Administrator

Advn Advanced

Air Air pressure weapons

Allo Allowable

AP20 Air Pistol 20

AP40 Air Pistol 40

AP60 Air Pistol 60

APis Air Pistol

AR20 Air Rifle 20

AR30 Air Rifle 30

AR40 Air Rifle 40

AR60 Air Rifle 60

ARif Air Rifle

AUT Austria

Auto Startup program

---

## B

B1 Bersaglio 1

B1 MG Ziel B1

B10m Pistol B 10m

B10m Rifle B 10m horizontal

B2 Bersaglio 2

B2 MG Ziel B2

B20m Rifle B 20m horizontal

B3 Bersaglio 9

B3 MG Ziel B3

B4 MG Ziel B4

B5 MG Ziel B5

B-5m Pistol B 5m

B6 MG Ziel B6

B7 MG Ziel B7

B8 MG Ziel B8

BesS Best shot

BFrn Bear

Biat Biathlon

BigB Big Bore

BLft Bear Left

BO10 Rifle B 10m ellipse

BO20 Rifle B 20m ellipse

Boar Wild Boar 2

Boar Wild Boar 5

Boar Wild Boar 5 Right

Both On Both

Brcd Edit Barcode

BRgt Bear Right

---

## C

C1 MG Ziel C1

C15m Pistol C 15m



## Shortcuts

|      |                            |
|------|----------------------------|
| C15m | Rifle C 15m                |
| C2   | MG Ziel C2                 |
| C3   | MG Ziel C3                 |
| C30m | Rifle C 30m                |
| C4   | MG Ziel C4                 |
| C5   | MG Ziel C5                 |
| C6   | MG Ziel C6                 |
| C7   | MG Ziel C7                 |
| C-7m | Pistol C 7m                |
| C8   | MG Ziel C8                 |
| Cal  | Calibre                    |
| Cal  | Display calibre            |
| Calf | Moose Calf                 |
| CAI  | Pistol C All               |
| CAI  | Rifle C All                |
| Carb | Carbine                    |
| Catg | Category                   |
| CFP  | Center Fire Pistol         |
| CGaS | Clear target after shots   |
| Cham | Chamois                    |
| Chmp | Swedish championship       |
| Clas | Classic                    |
| Clck | Time                       |
| Clmn | Column Configuration       |
| Clr  | Clear                      |
| ClrG | Clear target window        |
| ClrL | Clear List                 |
| Clss | Classes                    |
| Cmbn | Combined                   |
| Cmpl | Complete                   |
| Cnct | Connect                    |
| Cntr | Control                    |
| Comp | Compute series             |
| ConB | Convert both sighters      |
| Conf | Confirm                    |
| ConL | Convert last sighting shot |
| Crcl | Circle                     |
| CroA | Croatian AR Target         |
| Cros | Cross                      |
| CrSh | Cross Shot                 |
| CtMo | Control Mode               |
| CtmS | Customer Settings          |
| CU   | Control unit               |
| CU   | On-screen                  |
| CURs | Control unit reset         |

---

## D

|      |                    |
|------|--------------------|
| D100 | DFS100             |
| D10m | Pistol D 10m       |
| D15m | DFS 15m            |
| D200 | DFS 200            |
| D300 | DFS 300            |
| D40m | Rifle D 40m        |
| D-5m | Pistol D 5m        |
| DAll | Rifle D All        |
| DAN  | Dansk              |
| Dbl  | Double             |
| Debg | Debug              |
| Debg | Debug Mode         |
| DeFe | Deferred Shots     |
| DeMo | Demonstration Mode |
| Dflt | Default            |
| Dfrd | Deferred           |
| DisF | Screen-format      |
| Disp | Screen             |
| Dist | Distance           |
| Dist | Distance Index     |
| Divi | Divisions          |
| D-SP | D931-SP            |
| Duel | Duel mode          |

---

## E

|      |                       |
|------|-----------------------|
| E20m | Pistol E 20m          |
| EAll | Pistol E All          |
| Emty | Empty                 |
| EnAR | Enable Autoreset      |
| ENG  | English               |
| ERpt | Enable Repeat         |
| ESP  | Español               |
| Euro | European              |
| EurS | European with Seconds |

---

## F

|      |                  |
|------|------------------|
| FacS | Factory Settings |
| FB   | Full Bore        |
| Fig1 | Full Figure      |
| Fig2 | Half Figure      |
| Fig3 | One Third Figure |
| Fig8 | Eighth figure    |
| Fill | Fill Series      |
| FldA | Field A          |
| FldB | Field B          |
| FldD | Field D          |
| Fltr | Filter           |



## Shortcuts

|      |                           |
|------|---------------------------|
| Fnal | Final                     |
| FncK | Function Keys             |
| Foot | Footer                    |
| FRA  | Francais                  |
| Free | Free Rifle                |
| Free | Free Series               |
| Free | Free series start setting |
| FRes | Final reserved            |
| Frmt | Date format               |
| FrNo | Firer number              |
| FrNo | Firer number required     |
| Frst | First relay               |
| Func | Function                  |

### G

|      |                    |
|------|--------------------|
| GC   | Group championship |
| GER  | Deutsch            |
| GrGr | Gross Gross        |
| GrKl | Gross Klein        |
| GrLi | Gross links        |
| Grp  | Group              |
| GrRe | Gross rechts       |

### H

|      |                            |
|------|----------------------------|
| H-   | Hour minus 1               |
| H+   | Hour plus 1                |
| Head | Header                     |
| hGms | Chamois Hubertus           |
| Hnt  | Belgium                    |
| Hnt  | Hunting                    |
| HrdC | Print screen               |
| HrdW | Hardware                   |
| hRoe | Roe Left                   |
| Hwal | Hans Waldmann<br>Schiessen |

### I

|      |                   |
|------|-------------------|
| IDP3 | iDP3240           |
| Ilgl | Illegal Shot      |
| IncS | Include sighters  |
| Indi | Indication        |
| Ins0 | Insert zero shot  |
| InTn | Display Inner ten |
| Invr | Inverse           |
| InvS | Invalid shots     |
| ITA  | Italiano          |

### K

|      |                 |
|------|-----------------|
| KlGr | Klein Gross     |
| KIKl | Klein Klein     |
| KILi | Klein links     |
| KIRe | Klein rechts    |
| Knbn | Knabenschiessen |
| Knee | Kneeling        |
| Kybd | Keyboard        |

### L

|      |                          |
|------|--------------------------|
| Lang | Language                 |
| Layt | Layout                   |
| LCD  | On LCD                   |
| Legl | Legalisation             |
| LFed | Line feed                |
| LfLw | Large font in Listwindow |
| Locl | Local                    |
| LogH | Log Hex                  |
| Logn | Logon                    |
| LSht | Last Shot                |
| LSW  | Last Shot Window         |

### M

|      |                 |
|------|-----------------|
| M1   | 2x1/3 figure    |
| M2   | 1/1+1/3 figure  |
| M3   | 1/8+1/2 figure  |
| MalF | Malfunction     |
| Mddl | Middle relay    |
| Menu | Match Menu      |
| Min- | Minute minus 1  |
| Min+ | Minute plus 1   |
| Mntn | Maintenance     |
| Mon- | Month minus 1   |
| Mon+ | Month plus 1    |
| Moos | Running Moose   |
| Morg | Morgarten       |
| MP20 | Pentathlon 20   |
| MP30 | Pentathlon 3*10 |
| Msg  | Message         |
| Mtch | Match           |

### N

|      |               |
|------|---------------|
| N15m | NSF 15m       |
| NAMf | Non-Allowable |
| No   | Number        |



## Shortcuts

|      |                           |
|------|---------------------------|
| No   | SNr Prim                  |
| NoLf | Number of line feeds      |
| NOR  | Norsk                     |
| NOR  | Norway                    |
| NrOI | Number of Instancies diff |
| NSwe | New Swedish target        |
| NTC4 | NTTC4                     |
| NTC5 | NTTC5                     |
| NxtP | Next Primary Score        |
| NxtS | Next Secondary Score      |

## O

|      |                    |
|------|--------------------|
| Off  | 0                  |
| Oly1 | Oly100             |
| Oly2 | Oly200             |
| OP_A | OP Part 1          |
| OP_B | OP Part 2          |
| OPAS | OP A5 Sighters     |
| OPBS | OP B4 Sighters     |
| OpnS | Opening shooting   |
| Or75 | Ordnance pistol 75 |
| OrdP | Ordnance pistol    |
| Othr | Other              |

## P

|      |                           |
|------|---------------------------|
| P60  | Pistol 60                 |
| PA00 | PA100                     |
| Para | Parameter                 |
| PB00 | PB100                     |
| Pent | Pentathlon                |
| PFed | Paper feed                |
| PffW | Pfäffiker winter practice |
| PiBB | Big bore pistol           |
| PiBB | Sport Pistol Big Bore     |
| PiSB | Sport Pistol Small Bore   |
| Pist | Free Pistol               |
| Pist | Pistol                    |
| Pos  | Position                  |
| Pos  | Position required         |
| PPrW | Practice progress window  |
| PrCo | Practice Control          |
| Prct | Practice                  |
| Prec | Precision                 |
| Pres | Presentation              |
| Prim | Primary                   |
| PrnF | Print-format              |
| PrnF | Prone supported           |

|      |                       |
|------|-----------------------|
| Prnt | Graphic Printer Model |
| Prnt | On printer            |
| Prnt | Print                 |
| Prnt | Printing              |
| Proc | Report Processes      |
| Prog | Programs              |
| Prog | Swedish program       |
| Pron | Prone                 |
| PrOT | Print Overtime        |
| Prot | Print Protocol        |

## R

|      |                           |
|------|---------------------------|
| R BC | Activate remote barcode   |
| RapF | Rapid Fire                |
| Repo | Report Shot Counter       |
| Repo | Reports                   |
| Rept | Repeat                    |
| Requ | Requirements              |
| Res  | Reserved                  |
| RF3x | Rapid Fire 3x20           |
| RFP  | Rapid Fire Pistol         |
| RFPM | Military Rapid Fire Men   |
| RFPW | Military Rapid Fire Women |
| Rght | Right                     |
| Rifl | Rifle                     |
| RLd  | Reload                    |
| Rmot | Remote                    |
| Rmov | Remove Timer              |
| Roeb | Running Roebuck           |
| Rprn | Reprint                   |
| Rset | Reset                     |
| Rset | Reset Shot Counter        |
| Rset | Reset Timer               |
| RsNo | Reset Shot Number         |
| Run  | Running Target            |
| Rus  | Russian                   |

## S

|      |                           |
|------|---------------------------|
| Save | Save Customer Settings    |
| SbyS | Shot by Shot              |
| SCB  | Simulator SCB             |
| ScIF | Scale Factor              |
| Scnd | Scandinavia               |
| ScNI | Save number of instancies |
| Scor | Score                     |



## Shortcuts

|      |                  |
|------|------------------|
| SCPr | SC-Programs      |
| ScrB | Scoreboard       |
| Sec  | SNr Prim Sec     |
| Sec0 | Set second zero  |
| SecS | Secondary Score  |
| SeCt | Settings Control |
| Sens | Sensitivity      |
| SeqN | Total with SeqNr |
| SetS | Set Scale Factor |
| SetS | Set Subnet       |
| Sett | Set Timer        |
| Sett | Settings         |
| Sg57 | Stgw 57          |
| Sg90 | Stgw 90          |
| Shoo | Shoot            |
| Show | Display Messages |
| Shrt | Short            |
| Shrt | Short format     |
| ShtC | Shot Counter     |
| Shts | Shoot            |
| Sigh | Sighters         |
| SiSe | Single Execution |
| SjF4 | Schijf 4         |
| SjF5 | Schijf 5         |
| SjFK | Schijf K         |
| SjFS | Schijf S         |
| SlfT | Self Test        |
| SmlB | Small Bore       |
| SpPi | Sport Pistol     |
| SSns | Shot sensor      |
| Stat | Status flashing  |
| Stnd | Standard         |
| Stnd | Standing         |
| StPi | Standard Pistol  |
| StpL | Stop at Left     |
| Strt | Start Timer      |
| SubT | Subtotal         |
| Sui  | Switzerland      |
| SWE  | Moose SWE        |
| SWE  | Svenska          |
| Symb | Symbol           |
| Sys  | System           |

## T

|      |                   |
|------|-------------------|
| t xy | t x/y             |
| TChg | Target changer    |
| TCU  | Time Control Unit |

|      |                     |
|------|---------------------|
| TgAl | Target Alternative  |
| TgFM | Target Feed Message |
| TgNm | Display target name |
| Tgts | Targets             |
| ThiC | Thin Cross          |
| Timr | Programed Timers    |
| Timr | Timer               |
| TOTL | TOTAL               |
| Trgt | Target              |
| Trgt | Target test         |

## U

|      |            |
|------|------------|
| UsrG | User Group |
| USSe | US+Seconds |

## V

|      |             |
|------|-------------|
| Voeg | Vögelinsegg |
|------|-------------|

## W

|      |                 |
|------|-----------------|
| Weap | Weapon          |
| Weap | Weapon required |
| Weap | Weapon Type     |

## X

|      |         |
|------|---------|
| X    | DeltaX  |
| X+01 | X+0.1mm |
| X+1  | X+1mm   |
| X+10 | X+10mm  |
| X-01 | X-0.1mm |
| X-1  | X-1mm   |
| X-10 | X-10mm  |
| XY   | Spread  |

## Y

|      |              |
|------|--------------|
| Y    | DeltaY       |
| Y-   | Year minus 1 |
| Y+   | Year plus 1  |
| Y+01 | Y+0.1mm      |
| Y+1  | Y+1mm        |
| Y+10 | Y+10mm       |
| Y-01 | Y-0.1mm      |
| Y-1  | Y-1mm        |
| Y-10 | Y-10mm       |

## Z



## Shortcuts

Zi30    Zimmerstutzen 30

1. Slå på spänningen
2. Tavlan kommer fram på monitorn
3. Skjut provskotten [**P**]
4. Tryck **Match** på fjärrkontrollen eller kontrollenheten när du är klar med provskotten [**S**]. (D är dold skjutning där skotten inte visas förrän omgången är klar och skytten trycker på Visa)
5. När du är klar med tävlingsskotten tryck på **TOTAL** för att avsluta.

Ny skjutning?

Tryck på **Repetera**

(finns i menyn via fjärrkontrollen eller på kontrollenheten).

|                                                                                   |                                         |                          |
|-----------------------------------------------------------------------------------|-----------------------------------------|--------------------------|
|  | <b>INSTRUKTION FÖR SKJUTLEDAREN</b>     |                          |
|                                                                                   | <b>SIMULERA SKJUTNING MED DEMOSKOTT</b> |                          |
|                                                                                   | <b>Dok-nr:</b> XNA 250108               | <b>Datum:</b> 2011-08-18 |

1. Välj:

Home sedan System\Inställningar\Övrigt\Demo\På

2. För att simulera skott tryck på "INS" (0).

3. Utropstecknet efter skottets valör anger att skottet  
är simulerat.

|                                                                                   |                                                                          |                          |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------|
|  | <b>INSTRUKTION FÖR SKJUTLEDAREN</b>                                      |                          |
|                                                                                   | <b>HUR GÖRA OM NÅGON ÄNDRAT PÅ INSTÄLLNINGARNA<br/>I KONTROLLENHETEN</b> |                          |
|                                                                                   | <b>Dok-nr:</b> XNA 250110                                                | <b>Datum:</b> 2011-08-18 |

1. Gör markeringssystemet spänningslöst.
2. Stoppa in en smal pinne (exempelvis en popnit) i det översta hålet av de båda små hål som finns ungefär i mitten på kontrollenhetens baksida, vid kontakterna. (Bakom plåten finns nämligen en liten kontakt fastsatt på ett kretskort, så var försiktig).
3. Håll kvar pinnen, slå på nätspänningen. Efter ca 15 s hörs en ton från kontrollenheten. En text kommer upp på bildskärmen (Kundinställningar åter...). Ta ur pinnen.
4. Därmed har de sparade kundinställningarna återhämtats och kontrollenheten fungerar som tidigare.

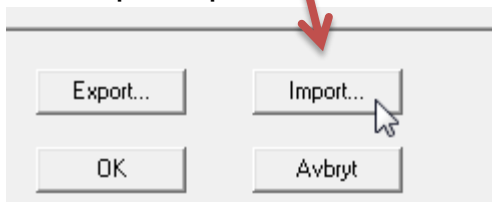


## Ändra kontrollenheter och SiusData från 10 m till 50 m eller tvärtom!

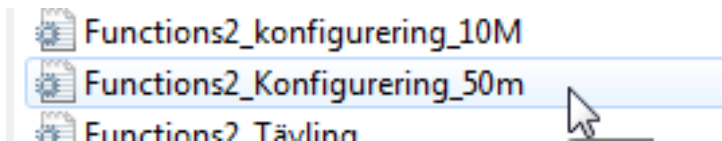
1. Klicka på ikonen Funktionstangenter i SiusData.



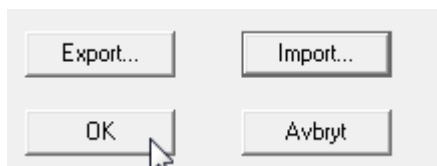
2. Klicka på Import.



3. Välj filen Functions2\_konfigurering\_50m.ini när du ställer om till 50m eller Functions2\_konfigurering\_10m.ini för 10m, filerna finns i mappen SiusData. När filen är markerad tryck på Öppna.



4. Tryck på OK.



5. Gör samtliga tavlor "aktiva" dvs. gröna.

| no | ctiv |  |
|----|------|--|
|    |      |  |
|    |      |  |
|    |      |  |
|    |      |  |



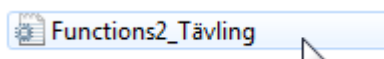
6. Klicka på knapparna 1 – 4 i ordning, vänta ca 30s mellan knapp tryckningarna. När ni har klickat på knapp 4 kommer ett pip att höras från kontrollenheten.

7. Klicka på ikonen Funktionstangenter i SiusData.



8. Klicka på Import.

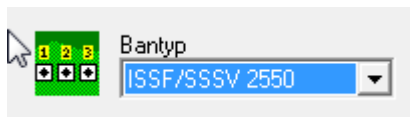
9. Välj filen Functions2\_Tävling.ini.  
Klicka på Öppna.



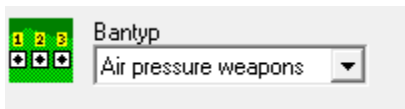
10. Tryck på OK.

11. Klicka på ikonen "allmänna inställningar"

12. Vid bantyp välj för 50m.



Eller för 10m välj



13. Klart.

Vi påminner om nya programmen för ISSF tävlingar som finns på vår hemsida [www.sius.se](http://www.sius.se) under Nyheter – Sport.

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| <b>1.    Introdution</b>                                               | <b>1</b>  |
| <b>2.    Hämtning av dokument och programvara</b>                      | <b>2</b>  |
| <b>3.    Kontrollera mjukvaruversion</b>                               | <b>3</b>  |
| <b>4.    Installation LonDongle</b>                                    | <b>4</b>  |
| <b>5.    Reset LonDongle</b>                                           | <b>5</b>  |
| <b>6.    Installation SiusData</b>                                     | <b>6</b>  |
| <b>7.    Uppgradering SiusData</b>                                     | <b>7</b>  |
| <b>8.    Installation och uppgradering SiusView</b>                    | <b>8</b>  |
| <b>8.    Uppgradering mjukvara i kontrollenhet och<br/>      tavla</b> | <b>9</b>  |
| <b>10.   Registrering av skyttar i SiusData</b>                        | <b>10</b> |
| <b>11.   SiusData vid tävling</b>                                      | <b>11</b> |
| <b>12.   Skapa skott i simuleringsmod SiusData</b>                     | <b>12</b> |
| <b>13.   SC-Program</b>                                                | <b>13</b> |
| <b>14.   Underhåll tavla S10</b>                                       | <b>14</b> |
| <b>15.   Underhåll tavla S25/50</b>                                    | <b>15</b> |
| <b>16.   Felrapport</b>                                                | <b>16</b> |
| <b>17.   Förklaring av csv fil</b>                                     | <b>17</b> |
| <b>18.   Error navigator</b>                                           | <b>18</b> |
|                                                                        | <b>19</b> |



[www.sius.se](http://www.sius.se)

# **UTBILDNING**

**SA941**

**Elektroniskt markeringssystem**

## Introduktion

Målsättningen för utbildningen är att ge nödvändig kunskap för att använda och underhålla SIUS anläggningar samt att kunna genomföra tävlingar med resultatredovisning och publikinformation med utnyttjande av systemets möjligheter.

Utbildningen omfattar:

- ✓ Grundläggande information om tekniken
- ✓ Underhåll och service
- ✓ Problembestämmning
- ✓ Resultatredovisning med PC-programmet Shooter och SIUS systemet
- ✓ Uppgradering av programvara



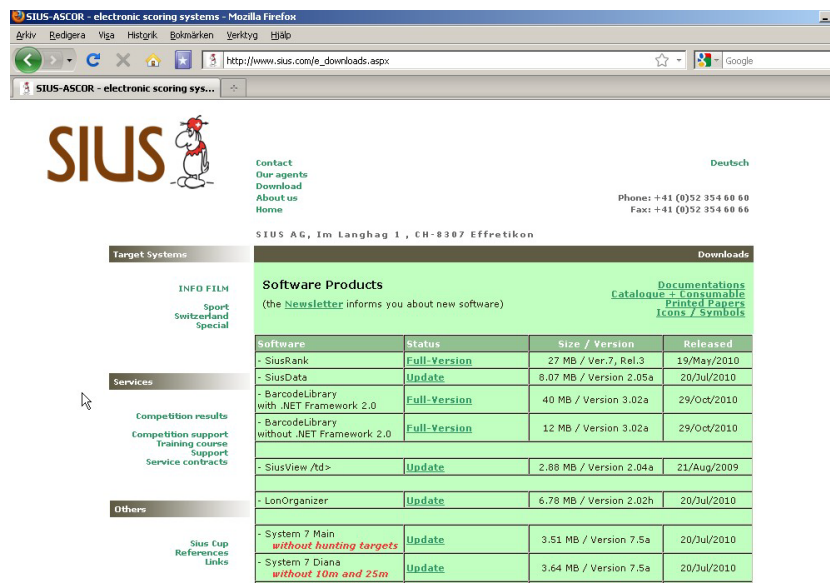
*Hämtning av  
dokument och  
programvaror*

[www.sius.se](http://www.sius.se)

|                                                                                   |                                       |                   |               |
|-----------------------------------------------------------------------------------|---------------------------------------|-------------------|---------------|
|  | Hämtning av dokument och programvaror |                   |               |
|                                                                                   | INSTRUKTION                           |                   |               |
|                                                                                   | Dok. nr: XNA 250155                   | Datum: 2011-02-05 | Sidan: 2 av 3 |

- Gå till hemsida: [www.sius.se](http://www.sius.se)





SIUS-ASCOR - electronic scoring systems - Mozilla Firefox

Arkiv Bedgerna Visa Historik Bökmärken Verktyg Bjälp

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Competition results  
Competition support  
Training course  
Support  
Service contracts

**Others**

Sius Cup  
References  
Links

**Software Products**  
(the Newsletter informs you about new software)

Documentation  
Catalogue - Consumable  
Printed Papers  
Icons / Symbols

| Software                                    | Status       | Size / Version          | Released    |
|---------------------------------------------|--------------|-------------------------|-------------|
| - SiusRank                                  | Full-Version | 27 MB / Ver.7, Rel.3    | 19/May/2010 |
| - SiusData                                  | Update       | 8.07 MB / Version 2.05a | 20/Jul/2010 |
| - BarcodeLibrary with .NET Framework 2.0    | Full-Version | 40 MB / Version 3.02a   | 29/Oct/2010 |
| - BarcodeLibrary without .NET Framework 2.0 | Full-Version | 12 MB / Version 3.02a   | 29/Oct/2010 |
| - SiusView /td>                             | Update       | 2.88 MB / Version 2.04a | 21/Aug/2009 |
| - LonOrganizer                              | Update       | 6.78 MB / Version 2.02h | 20/Jul/2010 |
| - System 7 Main without hunting targets     | Update       | 3.51 MB / Version 7.5a  | 20/Jul/2010 |
| - System 7 Diana without 10m and 25m        | Update       | 3.64 MB / Version 7.5a  | 20/Jul/2010 |

### Utbildning

Vi genomför kurser oftast i samarbete med Sisu (Obs stavningen) samt skyttesportförbunden eller klubbarna.

### Kommande utbildningar

Målsättningen för utbildningen är att ge nödvändig kunskap för att använda och underhålla SIUS-anläggningar samt att kunna genomföra tävlingar med resultatredovisning och publikinformation med utnyttjande av systemets möjligheter.

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- Grundläggande information om tekniken
- Underhåll och service
- Problembestämning
- Resultatredovisning med PC-programmet Shooter och SIUS systemet
- Uppgradering av programvara

Kursmaterial för Västmanlands skyttesportförbunds utbildning.

Allt material i pärmen kan hämtas [här!](#)

Excel bladet med SiusData Resultat XP kan hämtas [här!](#)





# *Kontrollera mjukvaruversion*

[www.sius.se](http://www.sius.se)

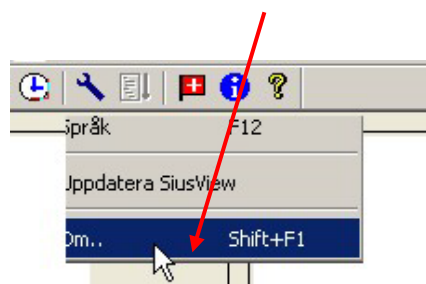


För att se vilken version av mjukvaran man har gör som nedan.

- Detta gäller för SiusData & SiusView
- Klicka på "frågetecknet"



- Klicka på Om



- Här ser man versionen





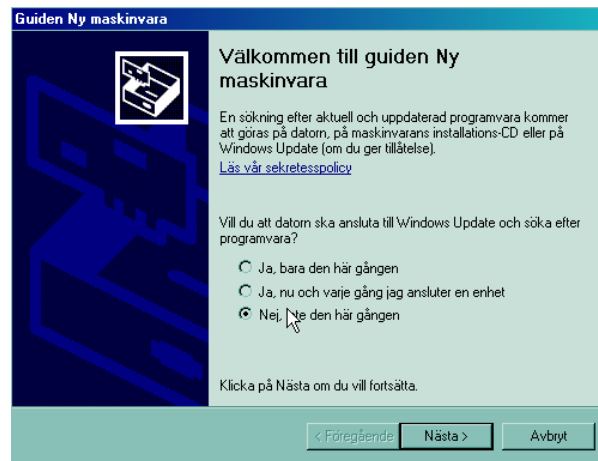
*Installation*  
*LON DONGEL*

[www.sius.se](http://www.sius.se)

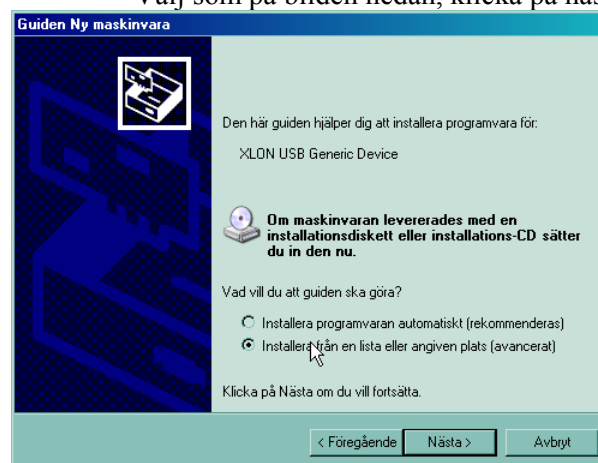
OBS! Anslut INTE LonDongeln till datorn innan SiusData är installerad



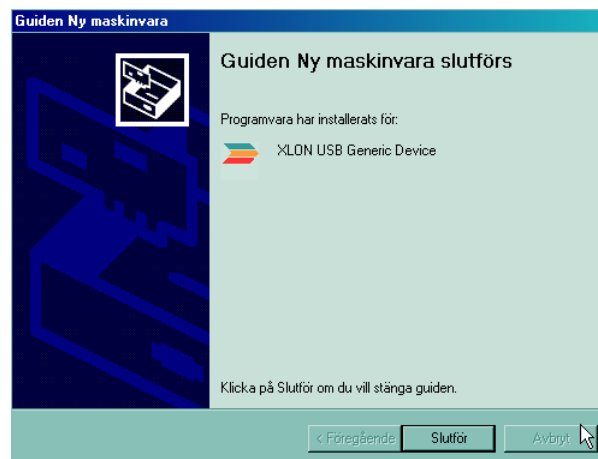
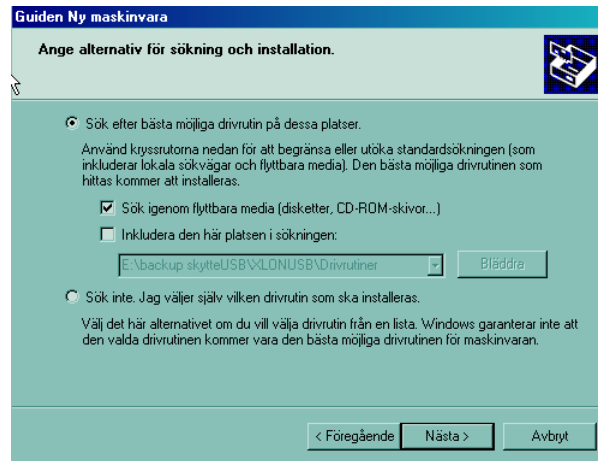
1. Anslut USB kontakten till datorn, när bilden nedan kommer upp välj Nej inte den här gången klicka på Nästa



2. Välj som på bilden nedan, klicka på nästa



3. Markera Sök igenom flyttbar media ..... Klicka på Nästa

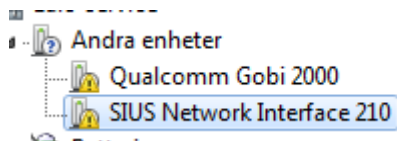


4. Klicka på Slutför, detta kommer att ske två gånger



## Installaton SIUS SNI

1. Anslut Sius SNI till datorn
2. Öppna Kontrollpanelen ->System ->Enhetshanteraren



3. Högerklicka på Sius Network Interface välj egenskaper välj uppdatera drivrutin

4. Välj det markerade alternativet

Hur vill du söka efter drivrutiner?

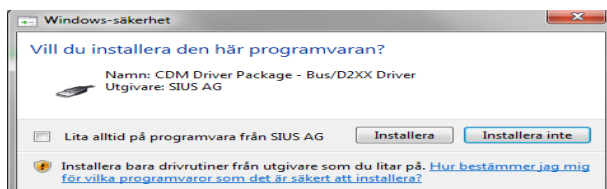
➔ Sök automatiskt efter uppdaterade drivrutiner  
Windows söker nu igenom datorn och på Internet efter de senaste drivrutinerna till din enhet, såvida du inte har inaktiverat den här funktionen i enhetsinstallationsinställningarna.

**➔** Välj drivrutinsprogramvara som redan finns på datorn  
Välj och installera drivrutinsprogramvara manuellt.

5. Leta rätt på mappen SNI på CD;n ock klicka på nästa

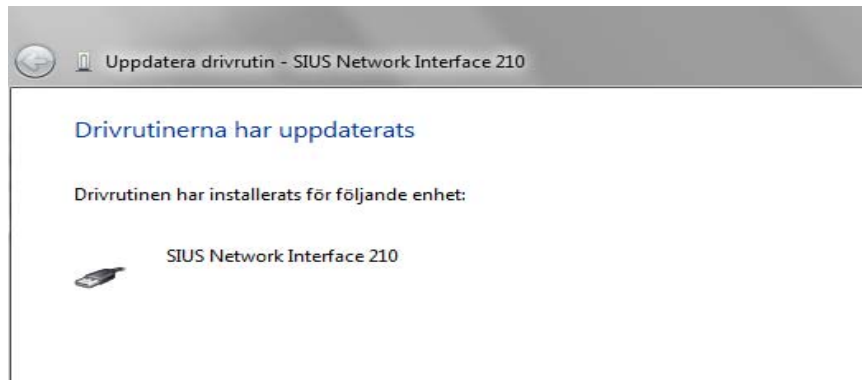


6. Klicka på installera





## 7. Sius SNI är nu klar att använda

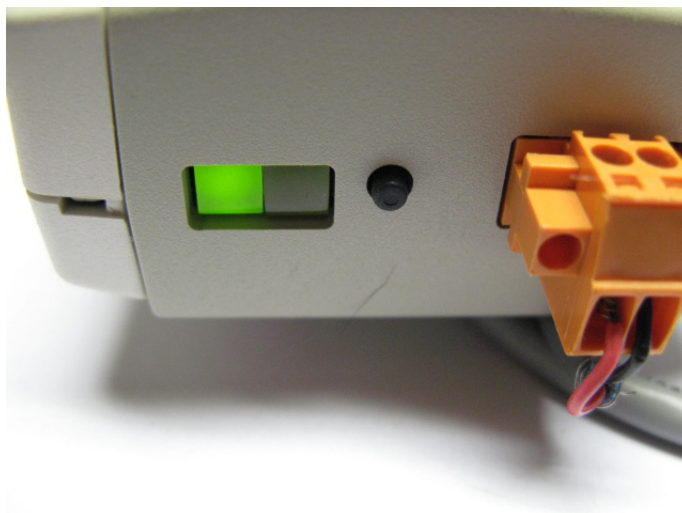




*Reset  
LonDongle*

[www.sius.se](http://www.sius.se)

Om du inte får kontakt med banan kontrollera att lysdioderna lyser som på bilden nedan.

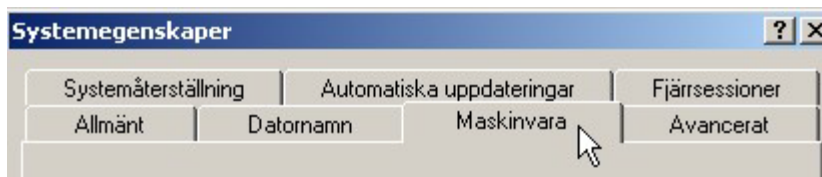


Om de inte lyser som bilden visar utan de istället lyser gult gör reset på Lon Dongeln enligt följande:

- Öppna kontrollpanelen



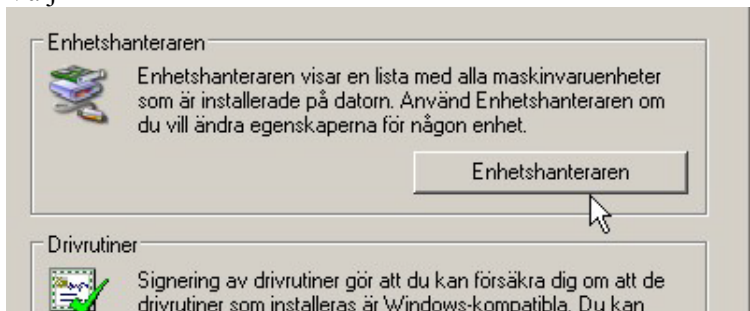
- Klicka på system  System



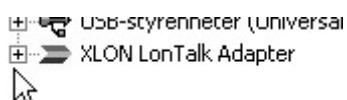
- Klicka på fliken Maskinvara



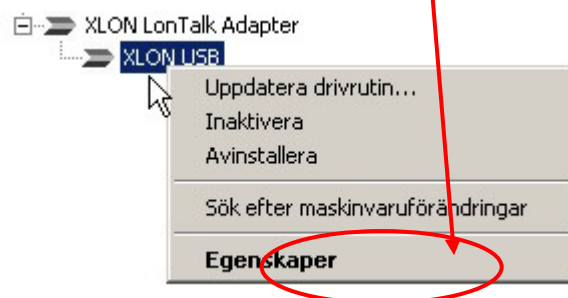
- Välj



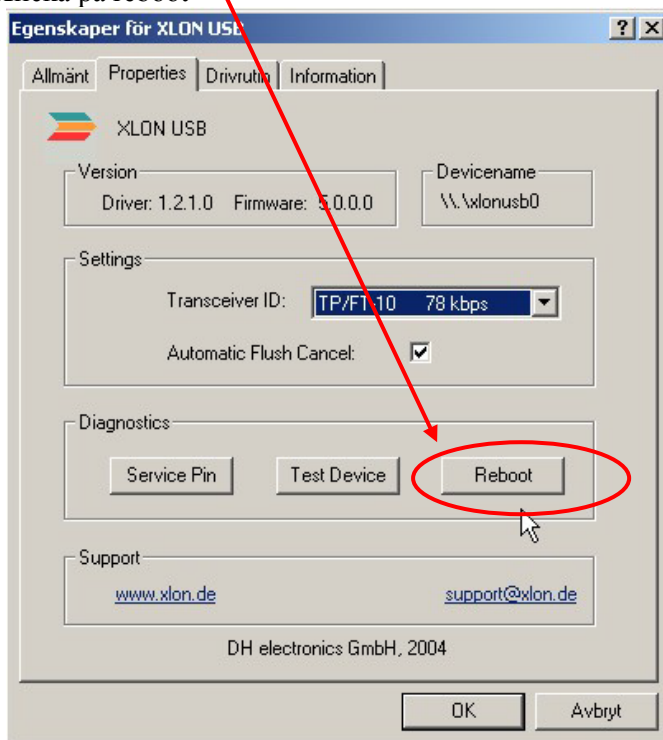
- Klicka på ”pluset” vid XLON



- Högerklicka på Egenskaper



- Klicka på reboot

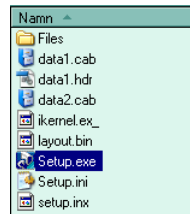




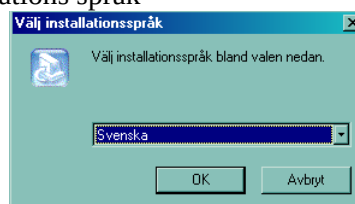
*Installation och  
konfigurerering av  
Sius Data*

[www.sius.se](http://www.sius.se)

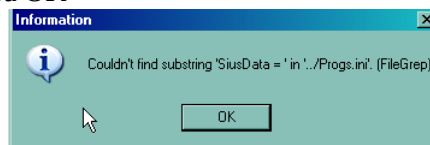
1. Leta reda på mappen SiusData på cd:n och klicka på filen Setup.exe



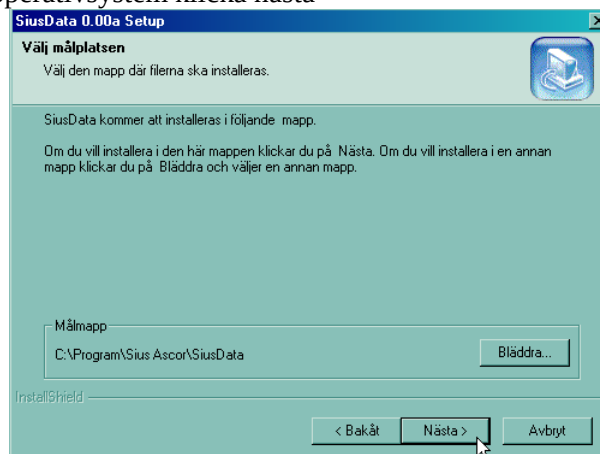
2. Välj installations språk



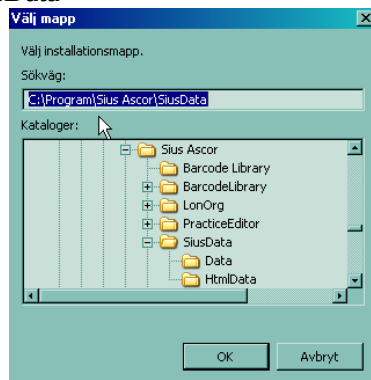
3. Klicka på OK



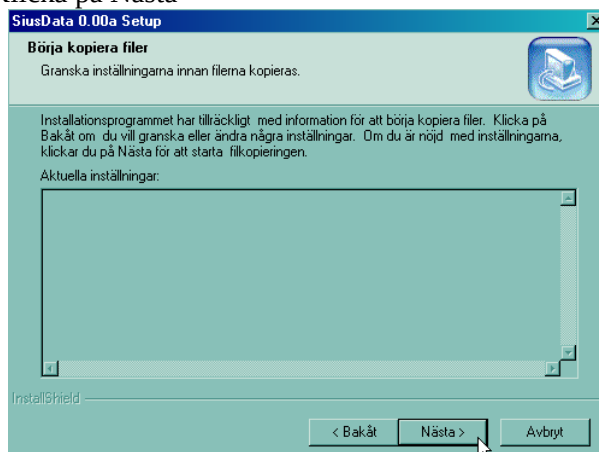
4. Om SiusData skall installeras på en dator med XP-operativsystem klicka nästa



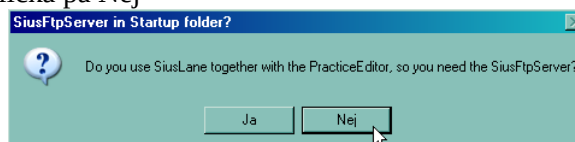
5. Om SiusData skall installeras på en dator med Vista eller Windows 7 ändra så att programmet installeras på C:\Sius Ascør\SiusData



6. Klicka på Nästa



7. Klicka på Nej



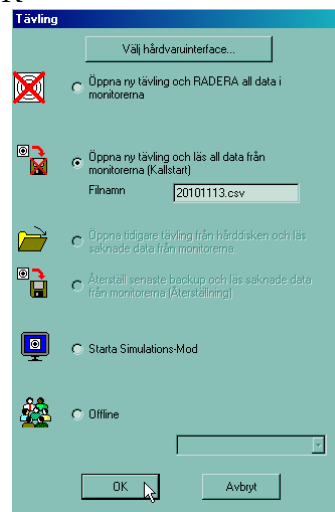
8. När installationen är klar starta SiusData genom att klicka på ikonen på skrivbordet



9. Välj Svenska klicka på OK



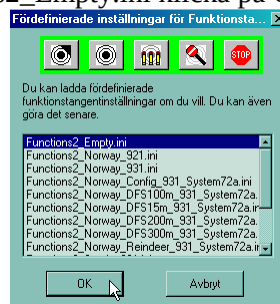
10. Klicka på OK



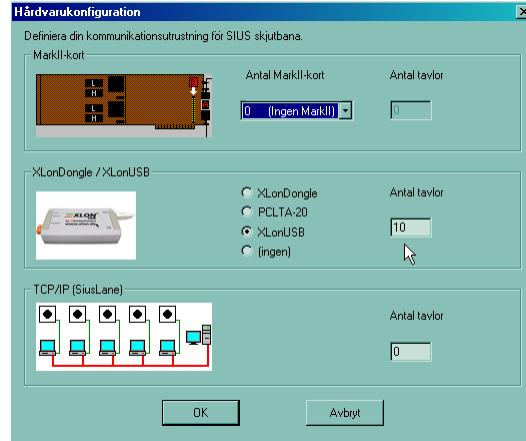
11. Välj CtmShoot2\_75a\_Main.ini eller senare version



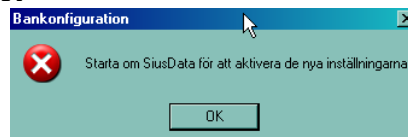
12. Välj Functions2\_Empty.ini klicka på OK



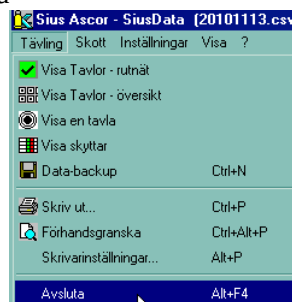
13. Markera XLon USB skriv in antalet tavlor



14. Klicka OK



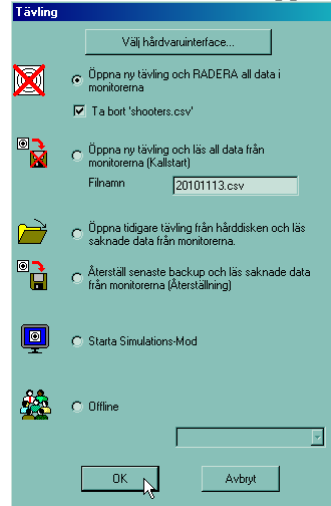
15. Klicka Avsluta



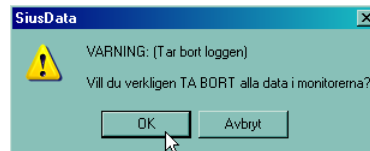
16. Starta SiusData från skrivbordet



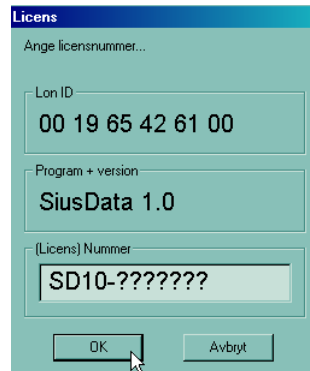
17. Markera det översta alternativet ”Öppna ny Tävling...”



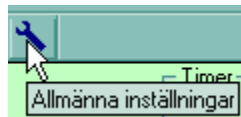
18. Klicka OK



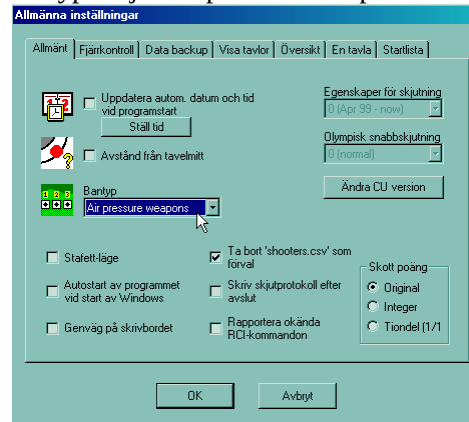
19. Skriv in Licensnumret för Lon Dongeln (är tryckt på Lon Dongeln)



20. Klicka på ikonen Allmänna inställningar



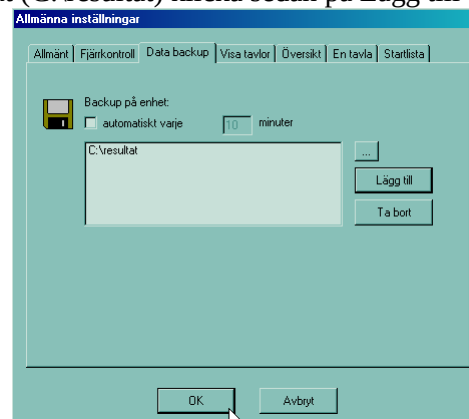
21. Under bantyp välj “Air pressure weapons”



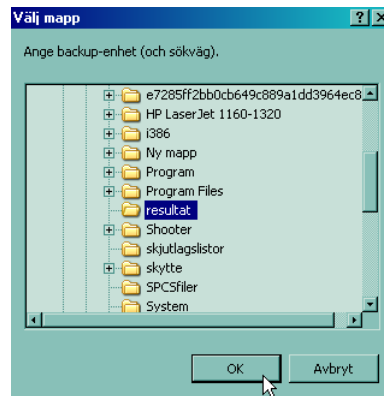
22. Fliken fjärrkontroll, välj inställningar som nedan



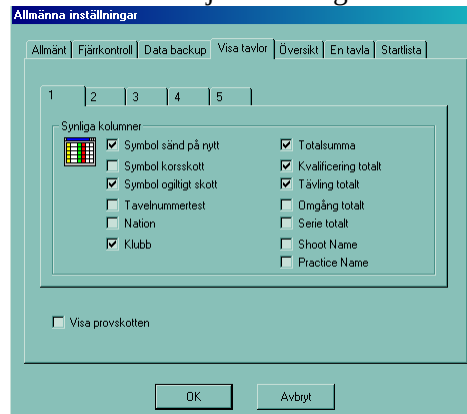
23. Fliken Data backup, om SHOOTER skall användas som resultatsystem skapa en mapp rakt under C:\ och kalla den ex. resultat (C:\resultat) klicka sedan på Lägg till



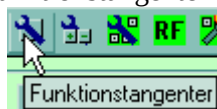
24. Välj mappen resultat som skapades i punkten ovan, klicka på OK



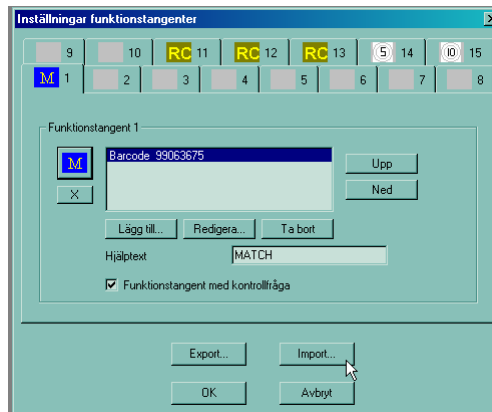
25. Fliken "Visa taylor" välj inställningar som nedan



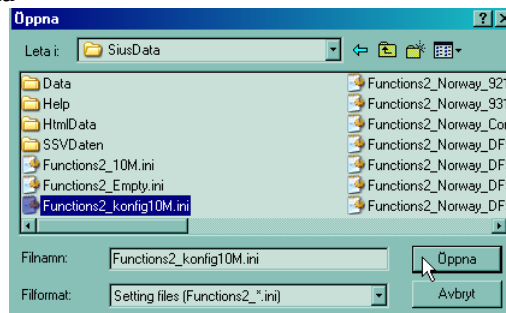
26. Kopiera filerna "Functions2\_10M.ini" och "Functions2\_konfig10M.ini" samt "CustomerBarcodes.txt" från Cd:n till mappen SiusData på datorn
27. Kopiera alla bitmap ikoner från mappen bitmappikoner på Cd:n till mappen SiusData
28. Klicka på ikonen Funktionstangenter



29. Klicka på import



30. Markera filen "Functions2\_konfigurering\_10M.ini" klicka på öppna



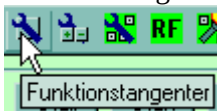
31. Gör samtliga banor "aktiva" genom att klicka på den gråa rutan för varje bana så att den blir grön

| Tavla | R                        | ! ctiv                   |
|-------|--------------------------|--------------------------|
| 1     | ⊙                        | <input type="checkbox"/> |
| 2     | <input type="checkbox"/> | <input type="checkbox"/> |
| 3     | <input type="checkbox"/> | <input type="checkbox"/> |
| 4     | <input type="checkbox"/> | <input type="checkbox"/> |
| 5     | <input type="checkbox"/> | <input type="checkbox"/> |
| 6     | <input type="checkbox"/> | <input type="checkbox"/> |
| 7     | <input type="checkbox"/> | <input type="checkbox"/> |
| 8     | <input type="checkbox"/> | <input type="checkbox"/> |

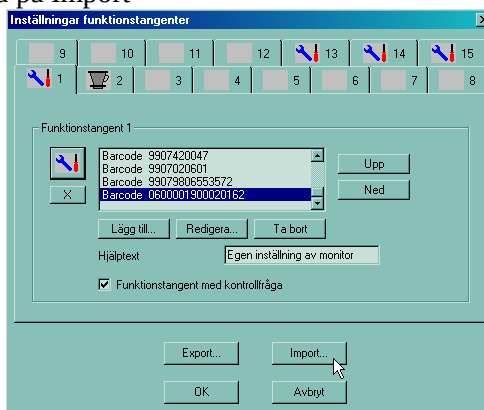
32. Klicka på funktionstangenterna i ordning 1 till 4 vänta ca 30sek mellan knapptryckningarna efter man tryckt på knapp fyra kommer ett pip att höra från kontrollenheten vilket innebär att anpassningen är sparad.

**1** till **4**

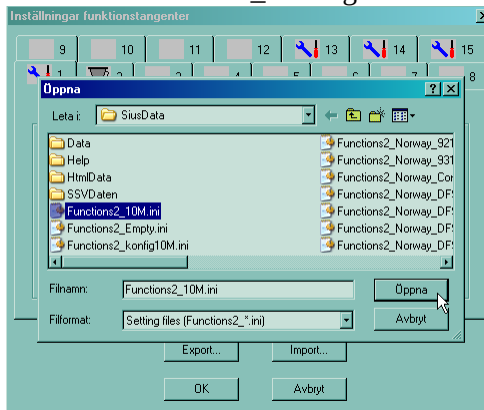
33. Klicka på ikonen Funktionstangenter



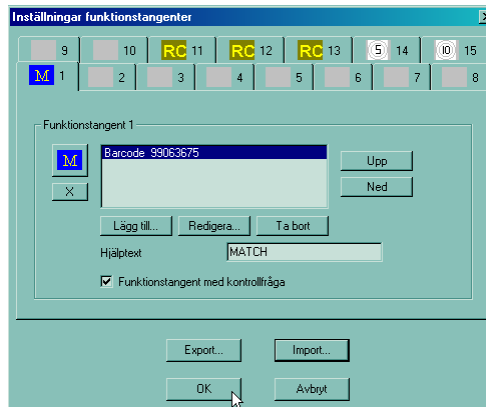
34. Klicka på Import



35. Markera filen " Functions2\_Tävling.ini" klicka på öppna



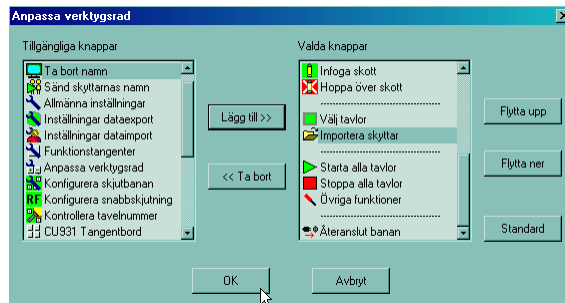
36. Klicka på OK dessa funktionstangenter används för att ställa in fjärrkontrollen, radering av grafiken samt Match knapp vid ex. finaler



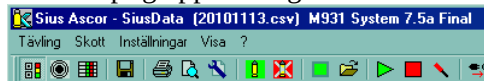
37. Klicka på ikonen "Anpassa verktygsrad"



38. Denna funktion används för att begränsa antalet ikoner i verktygsraden, markera den som skall tas bort och tryck på <<Ta bort



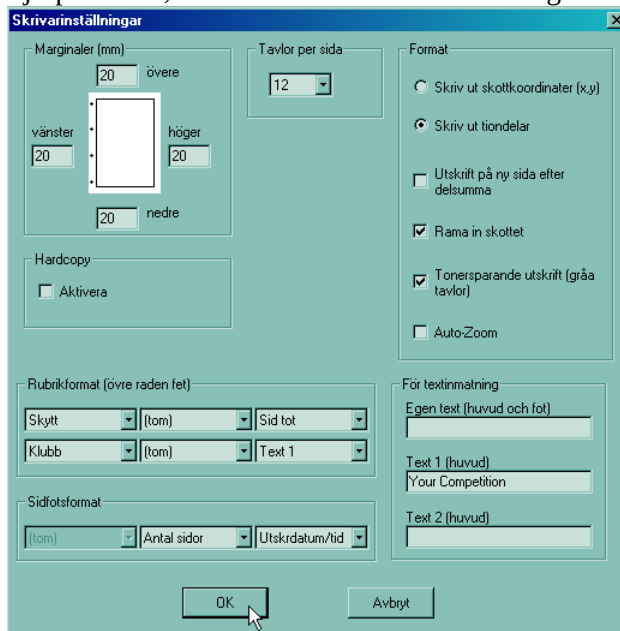
39. Detta är en lämplig uppsättning ikoner



40. Klicka på ikonen "skrivarinställningar"



41. Detta är en lämplig inställning för utskriften av skjutprotokoll, under Text1 skriver ni in tävlingens namn



**Skrivarinställningar**

Marginaler (mm)

20 övre

20 höger

20 nedre

20 vänster

Tavlor per sida

12

Format

☐ Skriv ut skottkoordinater (x,y)

☒ Skriv ut tiondelar

☐ Utskrift på ny sida efter delsumma

☒ Rama in skottet

☒ Tonersparande utskrift (gråa tavlor)

☐ Auto-Zoom

Hardcopy

☐ Aktivera

Rubrikformat (övriga raden fet)

Skytt (tom) Sid tot

Klubb (tom) Text 1

Sidfotsformat

(tom) Antal sidor Utskriftdatum/tid

För textinmatning

Egen text (huvud och fot)

Text 1 (huvud)  
Your Competition

Text 2 (huvud)

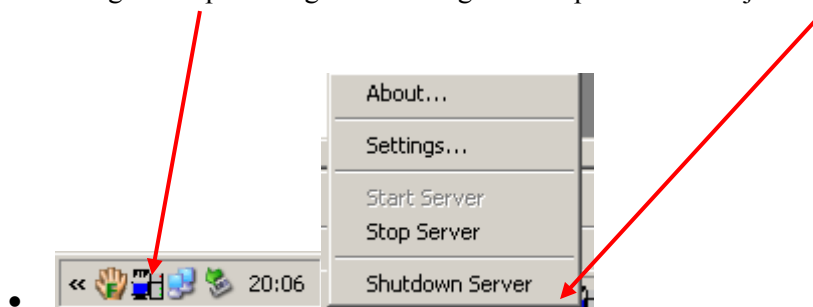
OK Avbryt



## *Uppgradering av Sius Data*

[www.sius.se](http://www.sius.se)

- Kopiera hela mappen C:\Program\SiusAscor\SiusData till ex. C:\temp
- Stäng SiusFtpServer genom att högerklicka på den och välj



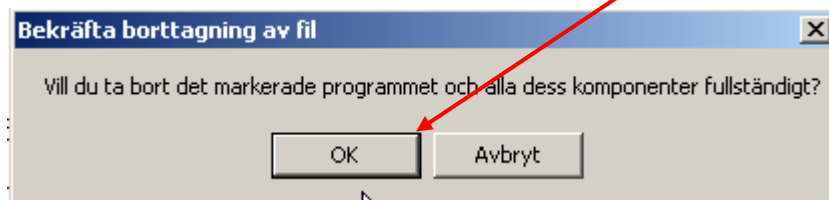
Hämta uppgraderingen från [www.sius.se](http://www.sius.se) ► Programvaror

|            |                        |                         |             |
|------------|------------------------|-------------------------|-------------|
| - SiusData | <a href="#">Update</a> | 8.07 MB / Version 2.05a | 20/Jul/2010 |
|------------|------------------------|-------------------------|-------------|

- Unzip filen SiusData\_Update.zip
- Klicka på filen setup.exe

| Files       |        | Filmapp                  |
|-------------|--------|--------------------------|
| data1.cab   | 900 kB | CAB-fil                  |
| data1.hdr   | 22 kB  | HDR-fil                  |
| data2.cab   | 1 kB   | CAB-fil                  |
| ikernel.ex_ | 337 kB | EX_-fil                  |
| layout.bin  | 1 kB   | BIN-fil                  |
| Setup.exe   | 162 kB | Program                  |
| Setup.ini   | 1 kB   | Konfigurationsinställ... |
| setup.inx   | 135 kB | INX-fil                  |

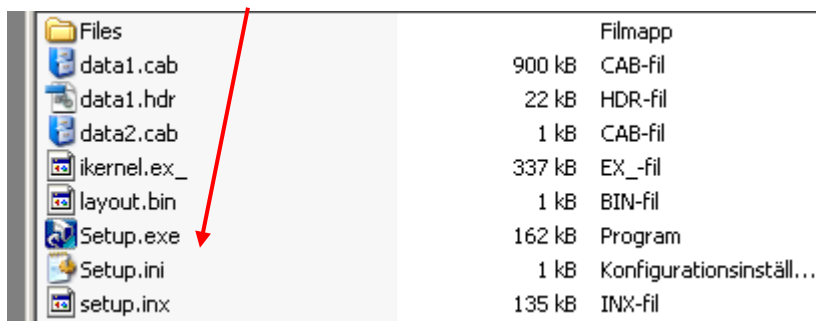
- Klicka på Kör, klicka på OK för språkval Svenska. Klicka på OK för bekräftning borttagning av fil



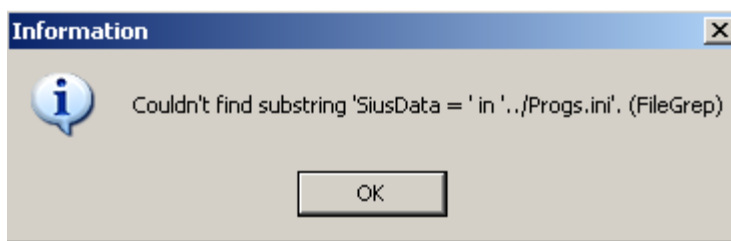


## INSTRUKTION

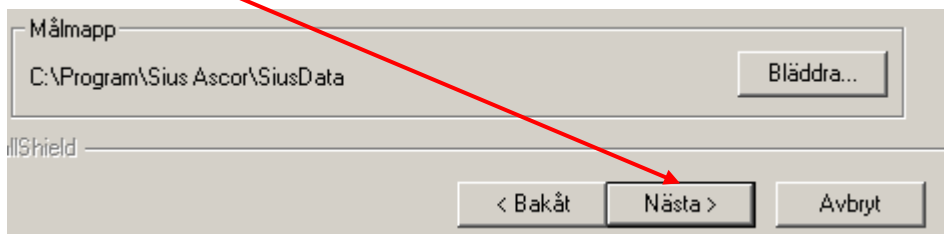
- Klicka på filen setup.exe igen.



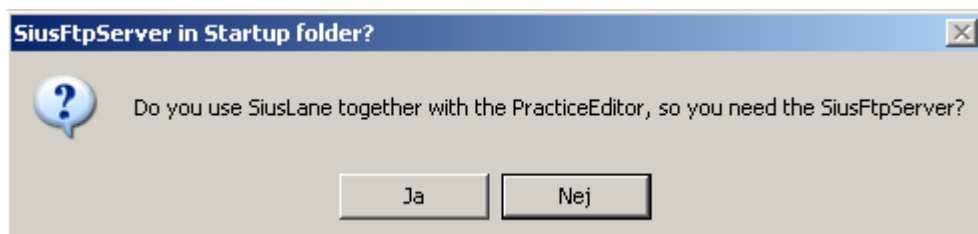
- Klicka på OK



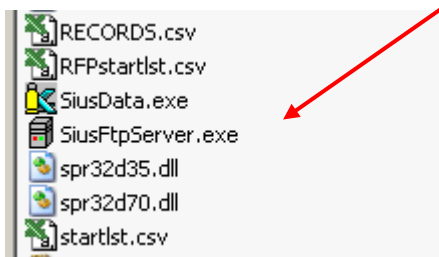
- Klicka på Nästa



- Svara Nej.



- Starta SiusFtpSever genom att klicka på den i mappen  
C:\Program\SiusAscor\SiusData



- Från den gamla SiusData som ni sparade tidigare (C:\temp) kopiera filerna RCI.ini, siusdata.ini, SCPrograms\_10.ini, Functions2\_konfig10M.ini, Functions2\_10M.ini CustomerBarcodes.txt samt alla \*.bmp filer.
- Starta SiusData
- 
- Om inte skyttar vars namn innehåller (ÅÄÖ) inte visas rätt på monitorn kontrollera filen RCI.ini, det skall stå som nedan  
**AsciiConversion = 0**  
Skrivskydda filen efter den sparats

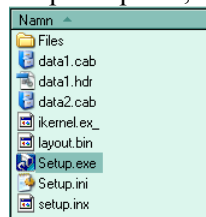


*Installation &  
uppgradering  
Sius View*

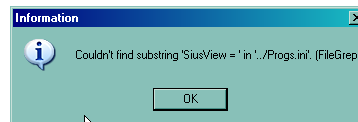
[www.sius.se](http://www.sius.se)

## Installation och konfigurering av Sius View

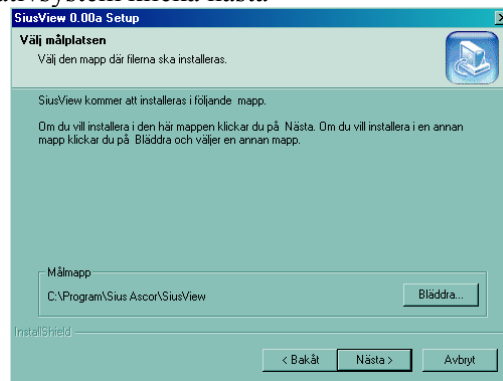
1. Leta rätt på filen Setup.exe på cd;n och klicka på den



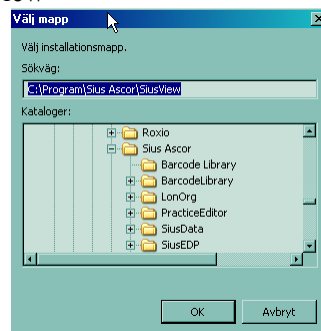
2. Klicka OK



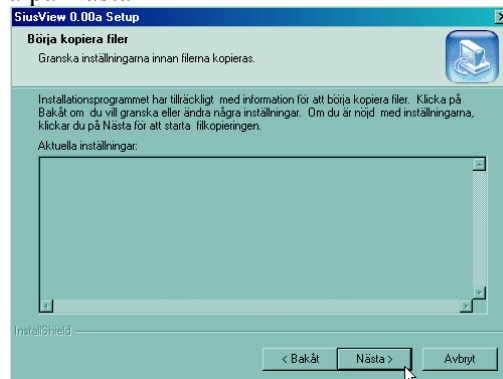
3. Om SiusView skall installeras på en dator med XP-operativsystem klicka nästa



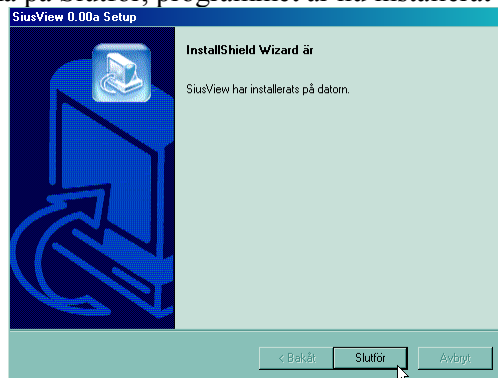
4. Om programmet skall installeras på en dator med Vista eller Windows 7 ändra så att programmet installeras på C:\Sius Ascort\SiusView



5. Klicka på Nästa



6. Klicka på Slutför, programmet är nu installerat



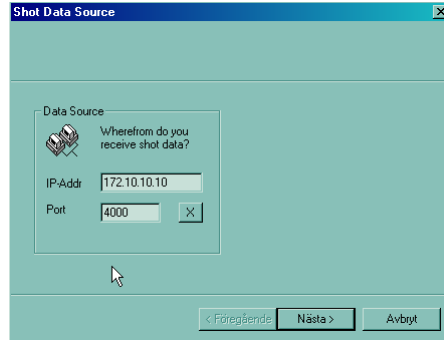
7. Starta programmet med ikon på skrivbordet



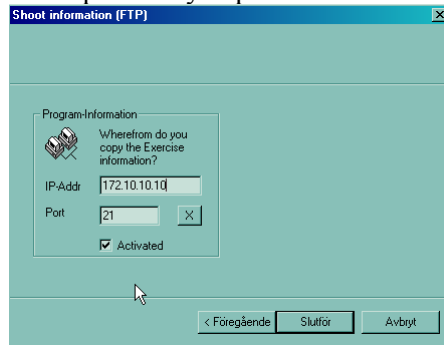
8. Välj språk Svenska och tryck OK



9. Skriv in IP-adress till datorn som SiusData körs på och tryck på Nästa



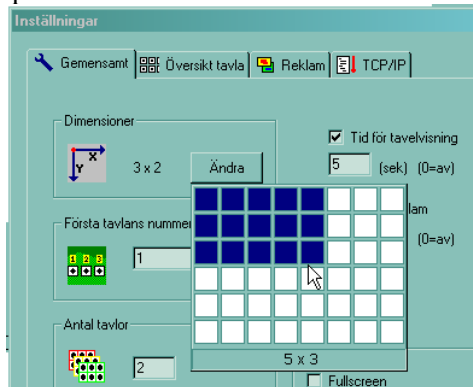
10. Bocka i Aktivera och skriv in IP-adress till datorn som SiusData körs på och tryck på Nästa



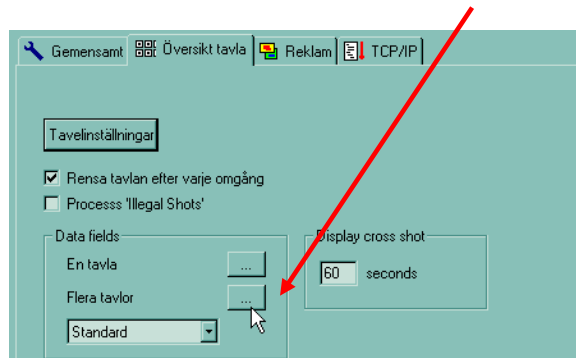
11. Klicka på ikonen Gemensamma inst.



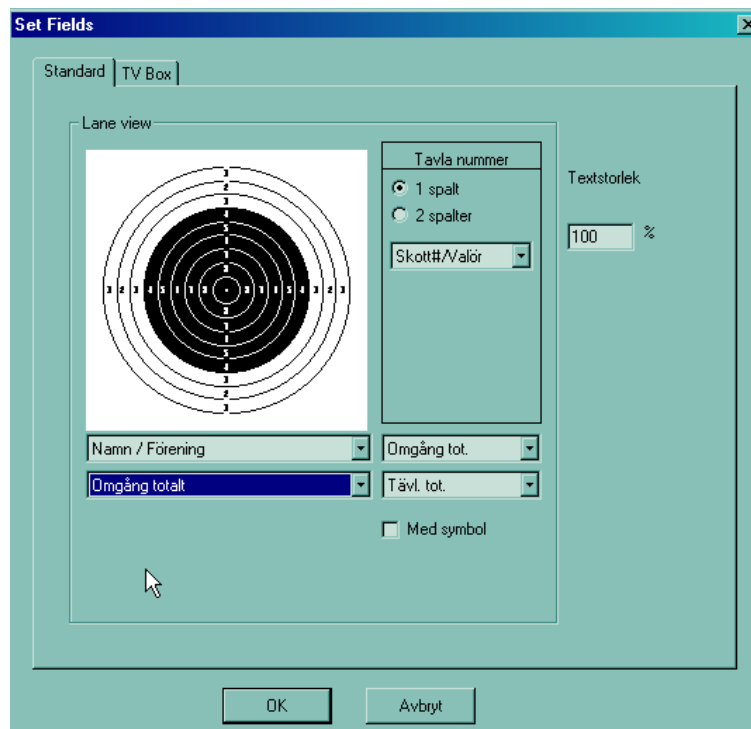
12. Klicka på Ändra och markera med musen antalet banor



13. I fliken Översikt tavla klicka på Flera tavlor



14. Detta är lämpliga inställning för visning



15. Starta om programmet för att inställningarna skall gälla

## Uppgradering:

- Kopiera mappen SiusView till ex. C:\temp
- Kör installationsprogrammet två gånger (första gången raderas programmet)
- När installationen är klar kopiera filen auxmon.ini (konfigureringsinställningar) från den gamla versionen av SiusView som ni sparade i första punkten till C:\Program\Sius Ascor\Siusview



## Uppgradering av tavla och kontrollenhet

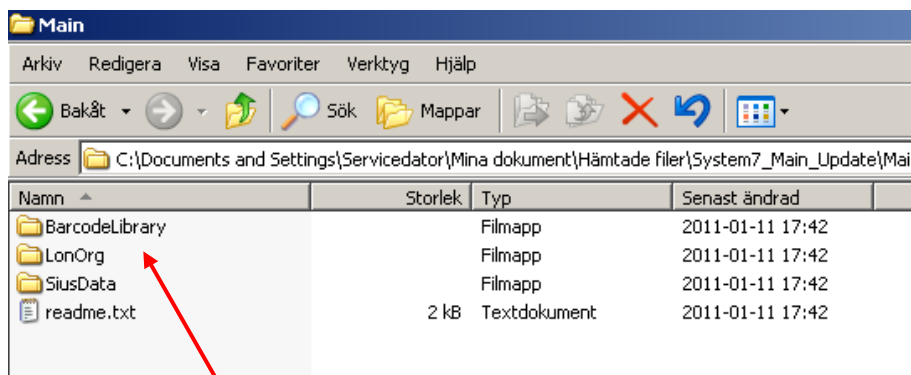
Ladda ner senaste versionen av mjukvaran från:

[www.sius.se](http://www.sius.se) ► Programvaror

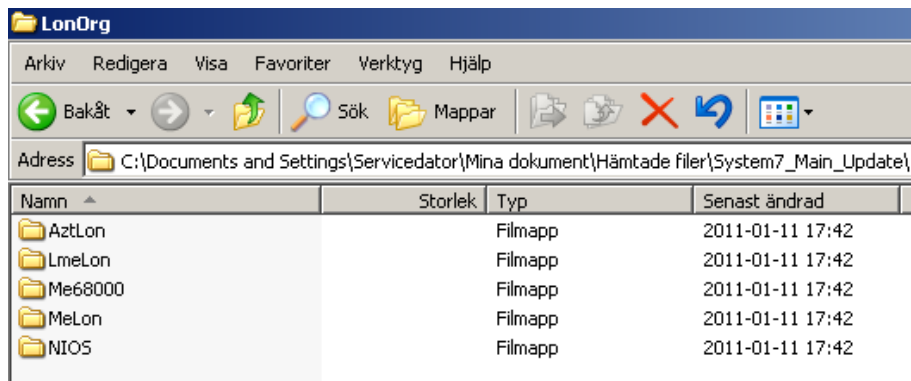
|                                                   |                        |                        |             |
|---------------------------------------------------|------------------------|------------------------|-------------|
| • System 7 Main<br><i>without hunting targets</i> | <a href="#">Update</a> | 3.51 MB / Version 7.5c | 12/Oct/2011 |
|---------------------------------------------------|------------------------|------------------------|-------------|

Klicka på Update, välj spara fil till ex. C:\temp

Filen är zippad, öppna den genom att klicka på den tills den är unzippad.



Klicka på Lon Org



Under mappen LmeLon kopiera filen LME\_20p.NXE (eller senare)  
till C:\Program\SIUS Ascor\LonOrg\Download\LmeLon



Under mappen Me68000 kopiera filen  
ME931\_System\_75a\_Main\_SWEDISH.68k (eller senare)  
till C:\Program\Sius Ascor\LonOrg\Download\Me68000

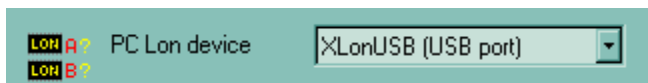
Under mappen NIOS kopiera filerna NIOS\_LS10\_10i.flash eller nyare och  
NIOS\_HS10-Sport\_11e. Flash eller nyare

Starta LonOrganizer

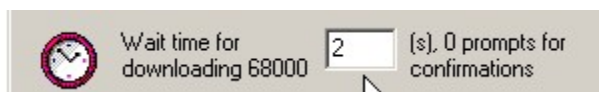
Klicka på ikonen Common



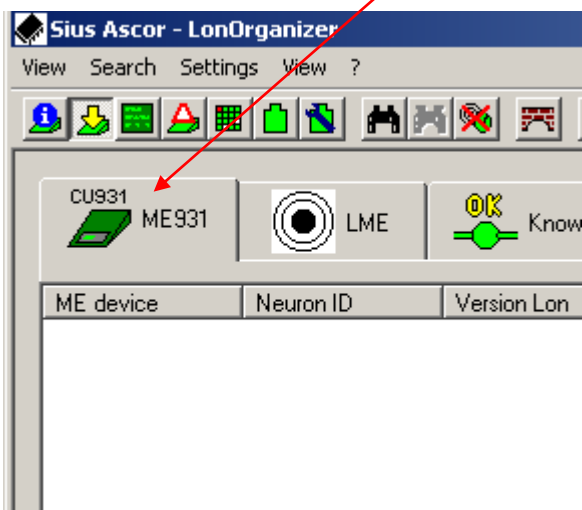
Kontrollera att det står XLon USB vid PC Lon alt. SIUS NetworkInterface  
annars ändra



Ändra denna inställning till 2sek

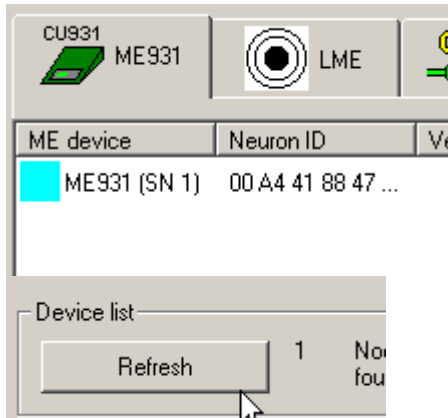


Välj Download och flik ME931

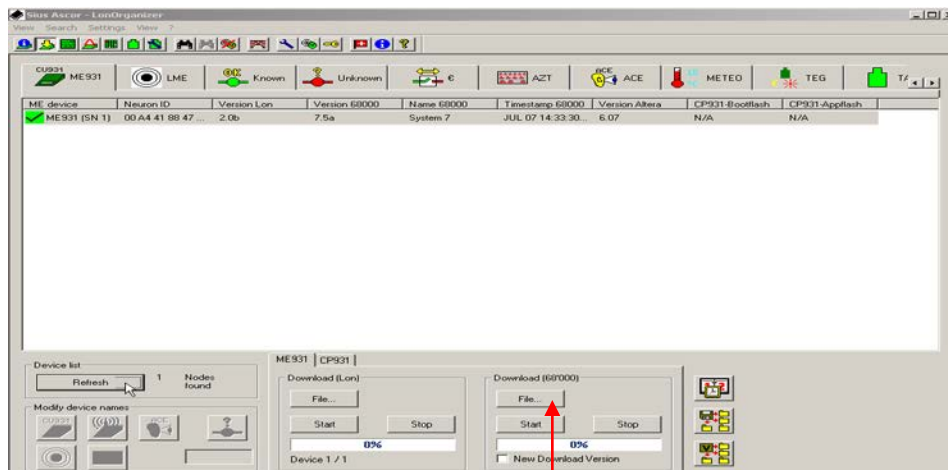




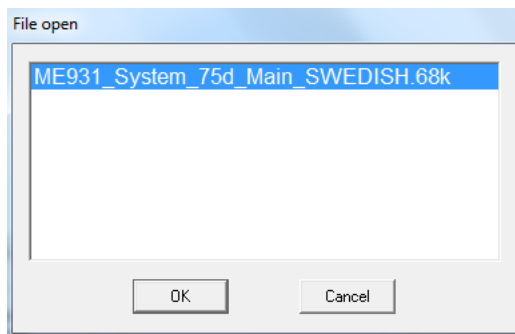
Klicka på  då söks efter installerade kontrollenheter



Klicka på knappen Refresh  
då kommer kontrollenhetens programversioner att visas.

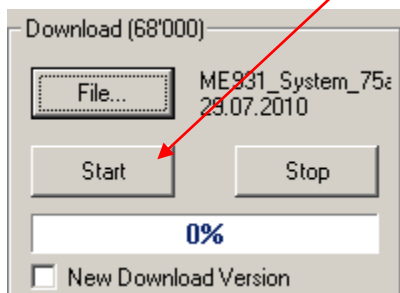


Klicka på File vid Download (68000)  
Välj den senaste filen i detta fall ME931\_System\_75d\_Main\_SWEDISH.68k



Klicka på OK

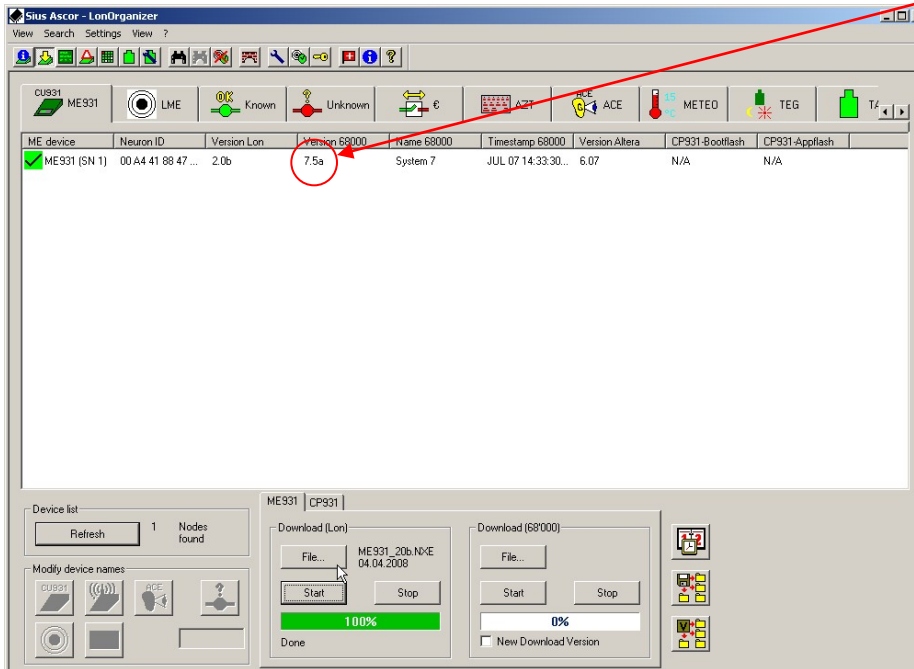
Bryt spänningen till banorna vänta 10sek. slå på spänningen till banorna, klicka på Start när bilden på monitorn blir randig



Nerladdningen till kontrollenheten startar tar ca. 20 min under nerladdningen kommer bilden på monitorn att "rulla"



När nerladdningen är klar klicka på Refresh och kontrollera att versionen är den rätta.



Uppgraderingen till tavlor under LME fliken och under fliken NIOS för HS och LS tavlorna sker på samma sätt men man behöver inte starta om banan innan nerladdningen

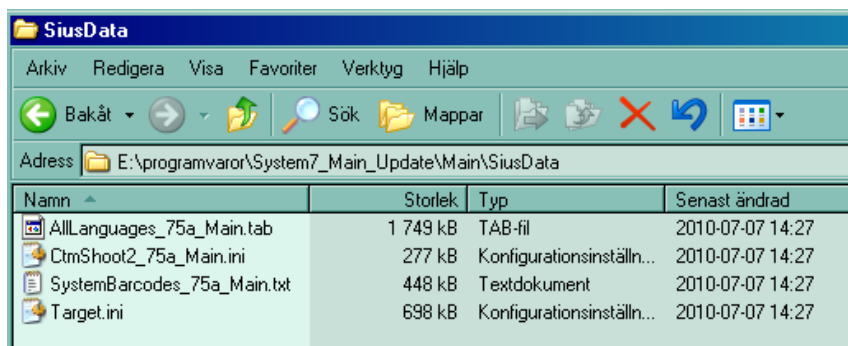
Efter att nerladdningen är klar starta om banan

Nu måste kontrollenheten konfigureras för språk, avstånd mm.  
Se instruction Installation SiusData



För att slutföra installationen skall även nya filer kopieras till SiusData

Kopiera filerna från mappen System7\_Main\_Update\Main till mappen där SiusData finns





*Instruktion för  
registrering av  
skyttar i Sius Data*

[www.sius.se](http://www.sius.se)

## Instruktion för registrering av skyttar i Sius Data.

Det finns två sätt för att registrera skyttar för användande i SiusData, ett som används vid träning för att få namn på utskrift och ev. kontrollremsa och ett vid tävling.

### 1. Träning



I SiusData klicka på ikonen "Visa skyttar", klicka på knappen Infoga.

Fyll i StartNr ex.1 på första skytten och Namn och Klubb. För nästa skytt fyll i startnummer 2 Namn och Klubb o.s.v.

|   | StartNr | Namn             | Förnamn | Vis | Klubb    |
|---|---------|------------------|---------|-----|----------|
| 1 | 1       | Lars Pettersson  |         |     | Västerås |
| 2 | 2       | Berndt Andersson |         |     | Götlunda |

Spara filen när alla skyttar är registrerade genom att klicka på knappen Export. Svara OK på frågan om sortering. Välj lämpligt filnamn ex. föreningens namn och lämplig mapp ex.

C:\PROGRAM\SIUS ASCOR\SIUSDATA.

OBS!! Glöm inte att spara filen genom att klicka på export annars är registreringarna borta.

När man startar en träning så skall man importera samma fil som man skapade ovan genom att klicka på ikonen Visa skyttarna och sedan på import och väljer den fil som ni sparade ex. Västerås.csv.

## INSTRUKTION

Dok. nr: XNA 250133

Datum: 2011-02-05

Sidan: 3 av 4

För att välja skytt för resp. tavla klicka på den gula ikonen före namnet och välj skytt i listan (sorteras på förnamn)

| Tavla | R  | X | ! | no | ctiv                                                                              | Namn             | StartNr |
|-------|----|---|---|----|-----------------------------------------------------------------------------------|------------------|---------|
| 1     | II |   |   |    |  | Lars Pettersson  | 1       |
| 2     | II |   |   |    |  | Berndt Andersson | 2       |

Standard Rifle 3\*20

Prone

Välj önskat skjutprogram

Sänd till skyttens namn samt skjutprogram till monitorn genom att klicka på den gröna pilen

## 2. Tävling:

Vid tävlingar, om inte externt resultat program används ex. Shooter, kan man använda en Excel fil (SiusDataResultatMacro) för registrering av skjutlag samt insamling av resultat.

Skriv in Startnummer, Namn och Förening klicka på det lilla "plusset"

+

N

O

F

Import Data (Helta)

# INSTRUKTION

Dok. nr: XNA 250133

Datum: 2011-02-05

Sidan: 4 av 4

Skriv in tavelnummer och skjutlag i respektive fält.

| Tavla | Lag |
|-------|-----|
| 1     | 1   |
| 2     | 1   |
| 3     | 1   |
| 4     | 1   |
| 5     | 1   |
| 6     | 1   |
| 1     | 2   |

Klicka på minustecknet för att "stänga" sidan.

Klicka sedan på ikonen Exportera skyttar.

Exportera skyttar

För att välja skytt för resp. tavla klicka på den gula ikonen före namnet och välj skytt i listan (sorteras på förnamn)

| Tavla | R  | X | ! | no | ctiv                                                                                | Namn             | StartNr |
|-------|----|---|---|----|-------------------------------------------------------------------------------------|------------------|---------|
| 1     | II |   |   |    |  | Lars Pettersson  | 1       |
| 2     | II |   |   |    |  | Berndt Andersson | 2       |

Standard Rifle 3\*20

Prone

Välj önskat skjutprogram

Sänd skyttens namn samt skjutprogram till monitorn genom att klicka på den gröna pilen, rutan i kolumnen "ctiv" måste vara grön d.v.s. banan är aktiv.

När skjutlaget är klart klickar man på ikonen ImportData i Excel dokumentet.

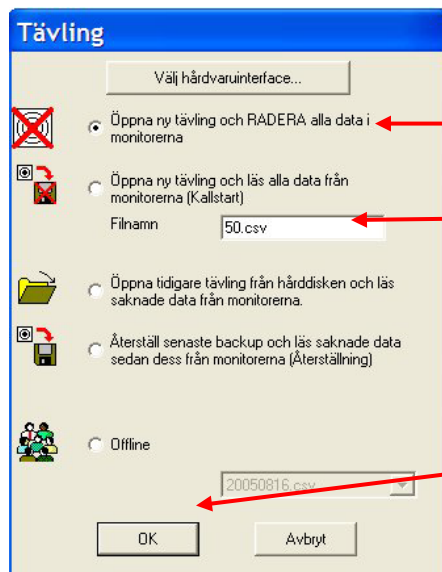


*SiusData vid  
tävling*

[www.sius.se](http://www.sius.se)

OBS! INNAN SIUS DATA STARTAS RENSA ALLA FILER I MAPPEN DÄR SKJUTRESULTATEN SPARAS: C:\resultat

1. Starta Sius Data,



Välj det översta alternativet.

Skriv in eget fil namn eller använd föreslaget datum,

OBS: Det får inte vara några mellanslag I filnamnet.

Om SHOOTER används ha max sex tecken i filnamnet

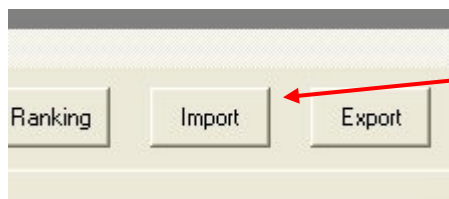
Tryck på OK

Om inte "papperkorgen" fösvinner starta det näst översta alternativet.



Klicka på ikonen "VISA SKYTTERNARNA"

2.



Klicka på Import. Via nätverket sök mappen skjutlagslistor på datorn där SHOOTER körs.

3.

Gör detta inför varje lag, om någon omplacering av skyttar skulle ha skett.



Klicka på ikonen "VISA BANOR"

4.

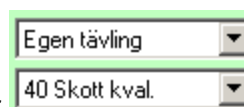


Välj ikonen "ÖPPNA NYTT LAG"

5.



Skriv in lagets nummer eller tryck på öka.



6. Välj rätt skjutprogram nere till vänster

7.  Klicka på gröna pilen

8. När alla skyttar är klara spara resultatet till SHOOTER

genom att trycka på ikonen  "DATA BACKUP"

9. Inför nästa skjutlag börja från punkt 2.

## **FINAL**

OBS! Inför final skall Sius Data startas om och ny databas skall skapas, se punkt 1.

**Flytta skytt inom skjutlaget**

| Tavla | R | X | ! | no | ctiv | Namn       | StartNr | Nat | Klubb |  |  |  |
|-------|---|---|---|----|------|------------|---------|-----|-------|--|--|--|
| 1     | ⊘ |   |   |    |      | LI         | 201     | CHN | CHN   |  |  |  |
| 2     | ⊘ |   |   |    |      | JORGOVA    | 202     | BUL | BUL   |  |  |  |
| 3     | ⊘ |   |   |    |      | LOGVINENKO | 203     | RUS | RUS   |  |  |  |
| 4     | ⊘ |   |   |    |      | B00        | 204     | KOR | KOR   |  |  |  |
| 5     | ⊘ |   |   |    |      | SALUKVADSE | 205     | GEO | GEO   |  |  |  |
| 6     | ⊘ |   |   |    |      | GROZDEVA   | 206     | BUL | BUL   |  |  |  |
| 7     | ⊘ |   |   |    |      | KASSOUMI   | 207     | GRE | GRE   |  |  |  |
| 8     | ⊘ |   |   |    |      | ACHOUMOVA  | 208     | AZE | AZE   |  |  |  |
| 9     | ⊘ |   |   |    |      | MONCHBAJAR | 209     | MGL | MGL   |  |  |  |
| 10    | ⊘ |   |   |    |      | SMIRNOVA   | 210     | RUS | RUS   |  |  |  |
| 11    | ⊘ |   |   |    |      | SEKARIC    | 211     | YUG | YUG   |  |  |  |
| 12    | ⊘ |   |   |    |      | BELIAEVA   | 212     | KAZ | KAZ   |  |  |  |
| 13    | ⊘ |   |   |    |      |            |         |     |       |  |  |  |
| 14    | ⊘ |   |   |    |      |            |         |     |       |  |  |  |
| 15    | ⊘ |   |   |    |      | B00        | 204     | KOR | KOR   |  |  |  |

Skriv in skyttens startnummer som skall flyttas till ledig bana,

tryck på gröna pilen för den banan.

**Radera namn på SiusView om banan går tom**

Sius Ascor - SiusData (20110209.csv) M931 System 7.5a Final

Tävling Skott Inställningar Visa ?

Sökning Alla fält Reset

| Tavla | R | ! | ctiv | Namn       | StartNr | Klubb |  |  |  |
|-------|---|---|------|------------|---------|-------|--|--|--|
| 1     | ⊘ |   |      | LI         | 201     | CHN   |  |  |  |
| 2     | ⊘ |   |      | JORGOVA    | 202     | BUL   |  |  |  |
| 3     | ⊘ |   |      | LOGVINENKO | 203     | RUS   |  |  |  |
| 4     | ⊘ |   |      | B00        | 204     | KOR   |  |  |  |
| 5     | ⊘ |   |      |            |         |       |  |  |  |
| 6     | ⊘ |   |      | GROZDEVA   | 206     | BUL   |  |  |  |
| 7     | ⊘ |   |      | KASSOUMI   | 207     | GRE   |  |  |  |
| 8     | ⊘ |   |      | ACHOUMOVA  | 208     | AZE   |  |  |  |
| 9     | ⊘ |   |      | MONCHBAJAR | 209     | MGL   |  |  |  |
| 10    | ⊘ |   |      | SMIRNOVA   | 210     | RUS   |  |  |  |
| 11    | ⊘ |   |      | SEKARIC    | 211     | YUG   |  |  |  |
| 12    | ⊘ |   |      | BELIAEVA   | 212     | KAZ   |  |  |  |

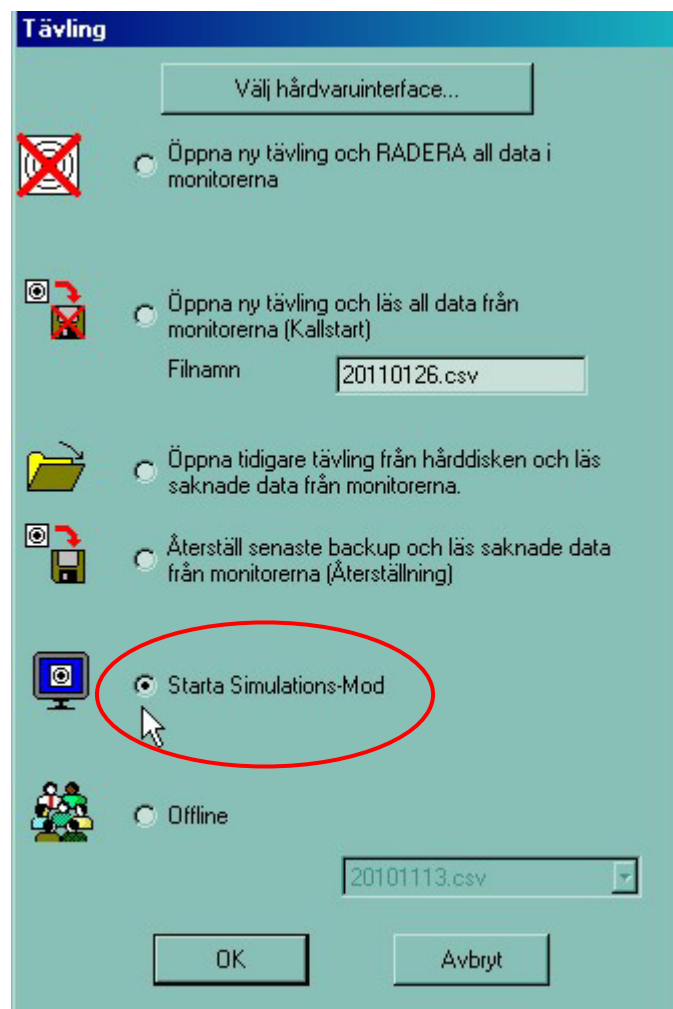
För att ta bort "gamla" resultat från SiusView om skytt saknas i nästkommande lag, aktivera då banan som saknar skytt



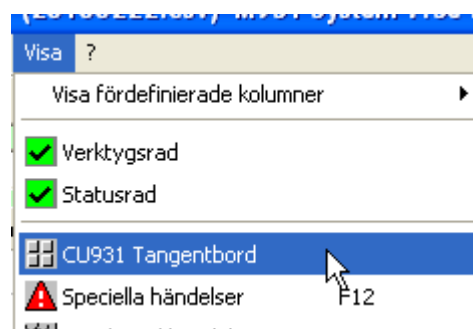
*SiusData*  
*skapa skott i*  
*simuleringsmod*

[www.sius.se](http://www.sius.se)

## Starta SiusData I simuleringsmod



## Öppna CU 931 Tangentbord





## INSTRUKTION

Dok. nr: XNA 250148

Datum: 2011-02-05

Sidan: 3 av 3

Sen är det bara att skapa skott med dessa knappar

Antal skott i serien

Skjutlaget skapas som en vanlig tävling, dock måste man använda dom skjutprogrammen som finns som standard ex.

**OBS! DET FUNGERAR INTE MED DE SKJUTPROGRAM SOM FINNS UNDER "EGEN TÄVLING"**



*SC-Program*

[www.sius.se](http://www.sius.se)

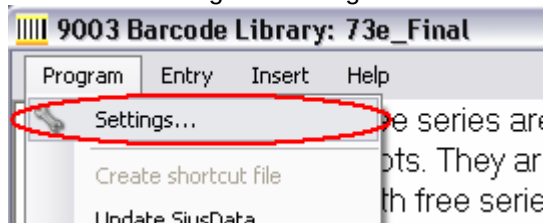
## SC-Programs instructions:

SC-Programs are customer programs which can be sent to the control unit and will be saved in the SC directory.

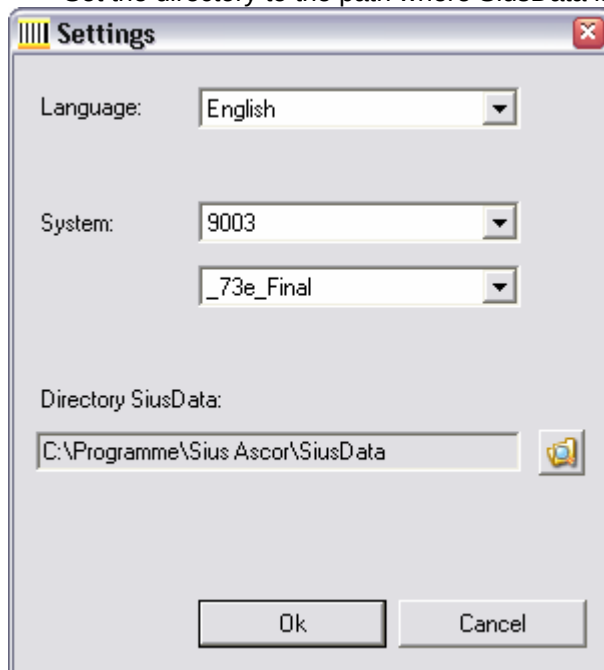
This Guide is a short description how to create such a SC-Program and send it to a control unit:

1. Open the Program Barcode Library.

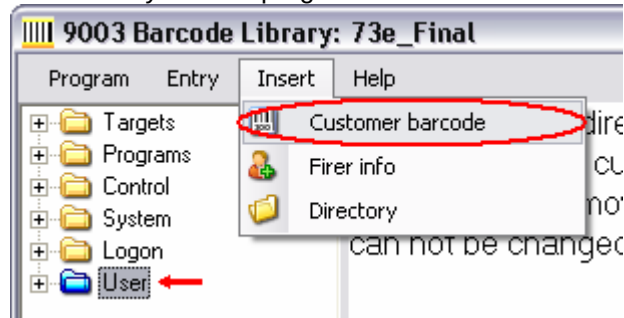
2. Click on "Program\Settings..."



3. -Check if you are using the version 7.3e\_Final for SA9003. If not, change it.  
-Set the directory to the path where SiusData is installed and click "Ok".



4. Create your own program. Click on the folder "User" and choose "Insert\Customer barcode\"

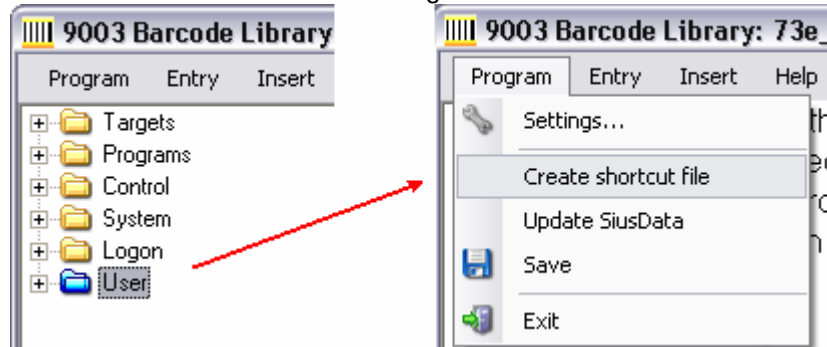


5. It appears a new window – the "Barcode editor".

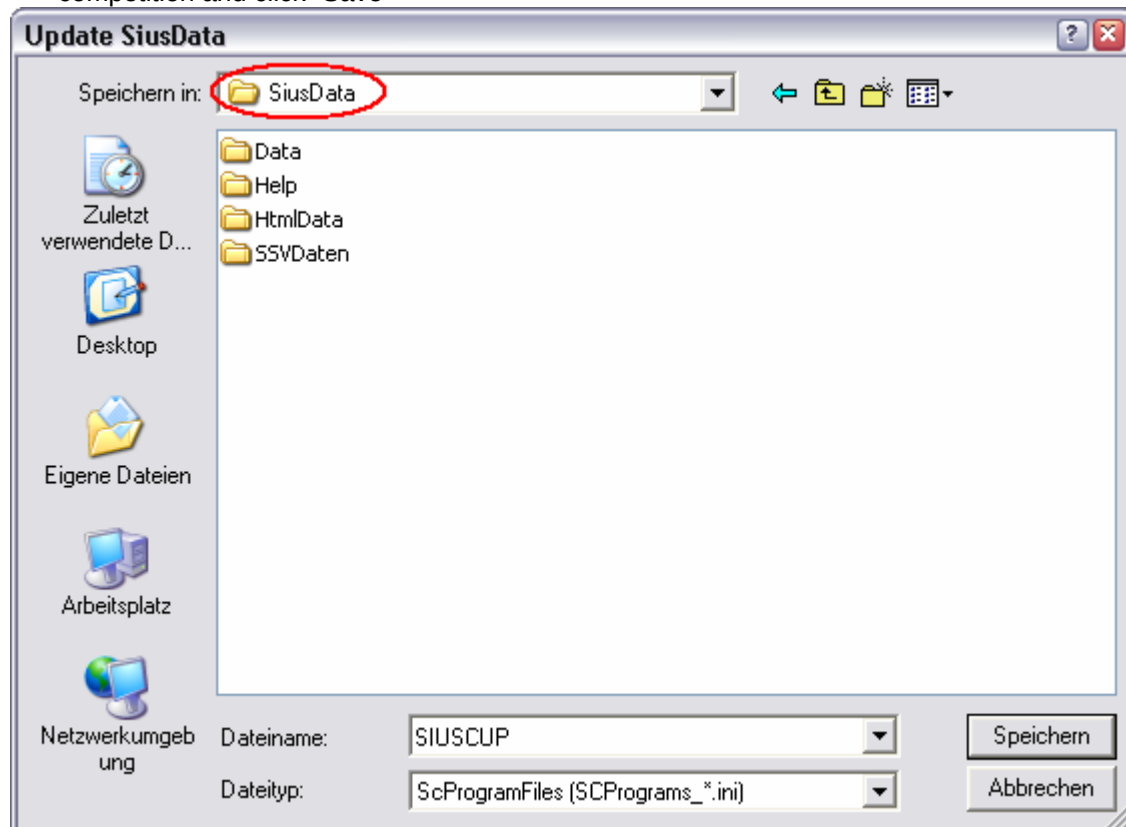
- Insert the name of the program. This name will appear on the monitor
- Choose a short name with maximum 4 letters. They will appear on the display of the control unit.
- Change to the right modus (Air pressure weapons, ISSF/SSSV 2550, ...)
- The legalisation is a free option which you can let 0.
- The external number is also optional.
- You may insert a description of your program.
- Insert the desired competition

6. Click "Ok" to accept and close the window.

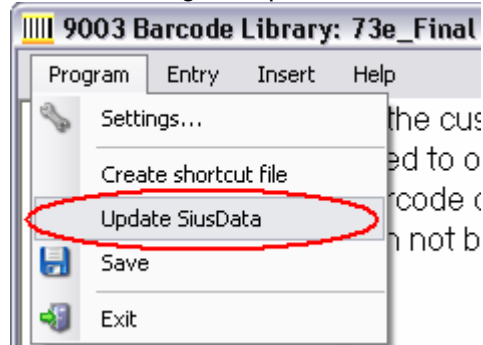
7. Click on User and Choose "Program\Create shortcut file"



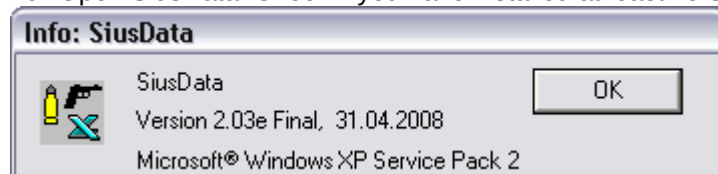
8. Check if the current folder is "C:\programs\Sius Ascor\SiusData". Choose a name for your competition and click "Save"



9. Go to "Program\Update SiusData"



10. Open SiusData. Check if you have installed at least version 2.03e.

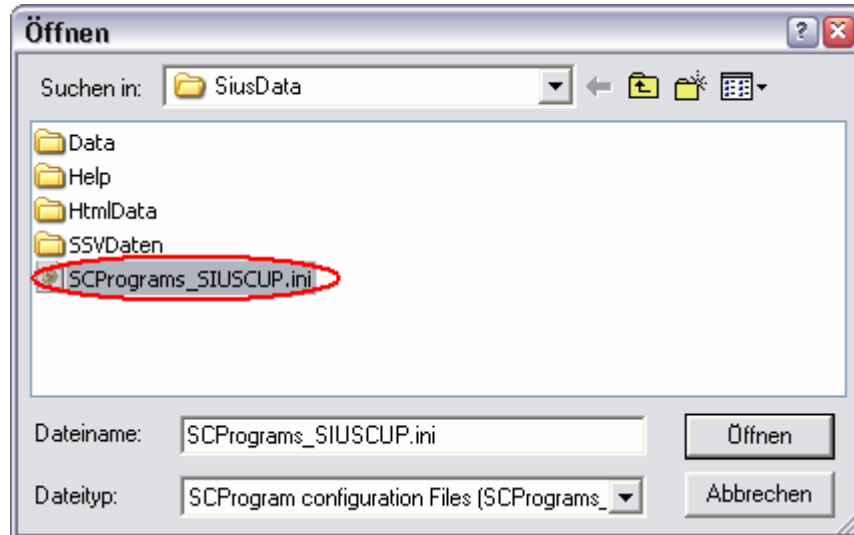


11. Activate all those lines to which you want to send the shortcut program.

| Lane |                          | R | X | ! | no | Active                              |  | Name |
|------|--------------------------|---|---|---|----|-------------------------------------|--|------|
| 1    | <input type="checkbox"/> |   |   |   |    | <input checked="" type="checkbox"/> |  |      |
| 2    | <input type="checkbox"/> |   |   |   |    | <input checked="" type="checkbox"/> |  |      |
| 3    | <input type="checkbox"/> |   |   |   |    | <input checked="" type="checkbox"/> |  |      |
| 4    | <input type="checkbox"/> |   |   |   |    | <input type="checkbox"/>            |  |      |
| 5    | <input type="checkbox"/> |   |   |   |    | <input type="checkbox"/>            |  |      |
| 6    | <input type="checkbox"/> |   |   |   |    | <input type="checkbox"/>            |  |      |

12. Choose "Settings\SCProgramme laden"

13. Open your created SCPrograms\_File. Now the SC-File will be sent automatically to the selected control units.



14. If the transfer is finished successful you will see this message:



15. Click "Ok" to close this window.

16. Now you can find the program in the control unit under "System\Control\SC-Programs" (F3,F3)

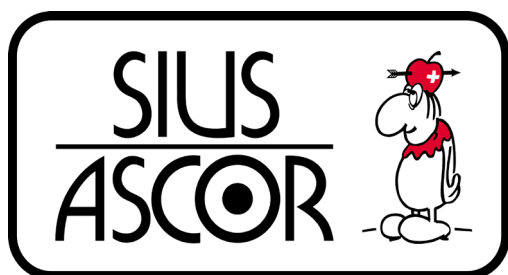
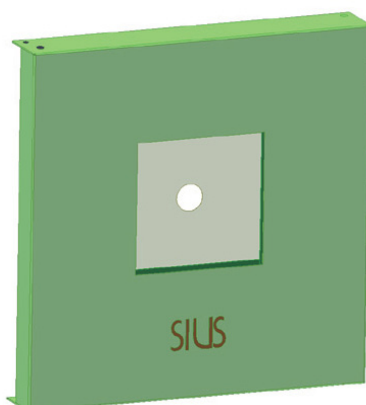


# Elektroniskt markeringsssystem

## Underhåll tavla

### LS10

### HS10



SIUS MIATRON AB

Tfn: 021-600 13 (+4621 600 13)

Internet: <http://www.sius.se>

E-post: [info@sius.se](mailto:info@sius.se)

## Innehållsförteckning

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### 1. Allmänt

Den elektroniska måttavlan LS10 och HS10 är konstruerad för alla 10 m luftvapendiscipliner, samt gevär 50 m.

Vänligen beakta följande anvisning för underhållet av tavlan.

### 2. Uppbyggnad och funktion

När kulan passerar genom tavlan detekteras kulan av tre oberoende infraröda laser-mätsystem. Kulans position detekteras med en hög noggrannhet. Den höga noggrannheten kan även utnyttjas för att visa kulans form! Därför är LASERSCORE® världens noggrannaste tavla.

Eftersom mätningen sker vid tavlans horisontella plan finns ingen risk för parallaxfel om skjutningen sker snett mot tavlan. Detta är helt unikt och uppnås inte av någon annan tavla.

Som tillval finns bland annat belysning och skottverifiering med pappersremsa, nödvändigt vid internationella ISSF mästerskap. Skottverifieringsmodulen monteras mot tavlans baksida.

Den väderskyddade elektroniken möjliggör att tavlan kan användas, inte bara för 10 m luftgevär och pistol utan även för korthåll gevär utomhus.

### 3. Underhåll

Underhållet av tavlan säkrar en felfri drift. Följande punkter skall beaktas:

- ✓ att tavlans inre är rengjord och att de tre mottagarna inte är täckta av stoft

Tips!

Inför varje tävling skall tavlan rengöras.

## 4. Förbrukningsmaterial

| Pos. | Artikel nr      | Beskrivning                    |
|------|-----------------|--------------------------------|
| 1    | LS10A043R2      | Försättstavla (PVC) Gevär      |
| 2    | S20A022LS10/100 | Försättstavla Gevär papper     |
| 3    | LS10A040R2      | Försättstavla (PVC) 50 m Gevär |
| 4    | LS10A044R2      | Försättstavla (PVC) Pistol     |
| 5    | S20A023/10      | Försättstavla Pistol papper    |

## 5. Materialbeställning

Förbrukningsmaterial och reservdelar kan du beställa från:

SIUS MIATRON AB

Mälbyvägen 26

722 33 Västerås

Tfn: 021-600 13 (+4621 600 13)

Internet: <http://www.sius.se>

E-post: [order@sius.se](mailto:order@sius.se)

## 6. Noteringar



## *Felrapport*

[www.sius.se](http://www.sius.se)

## Felrapport till SIUS skall innehålla:

- 1) Felbeskrivning

Utskrift genom följande tangenttryckning på kontrollenheten:

- 2) Hjälp tangenten
- 3) Home\System\Underhåll\BIT-test\Taveltest
- 4) Home\System\Rapport\Log\Allt
- 5) Home\System\Underhåll\Rapport\Log\Log Hex
- 6) Home\System\Underhåll\Rapport\Inställningar\Utskrift



*F<sup>o</sup> rklaring csv-fil*

[www.sius.se](http://www.sius.se)

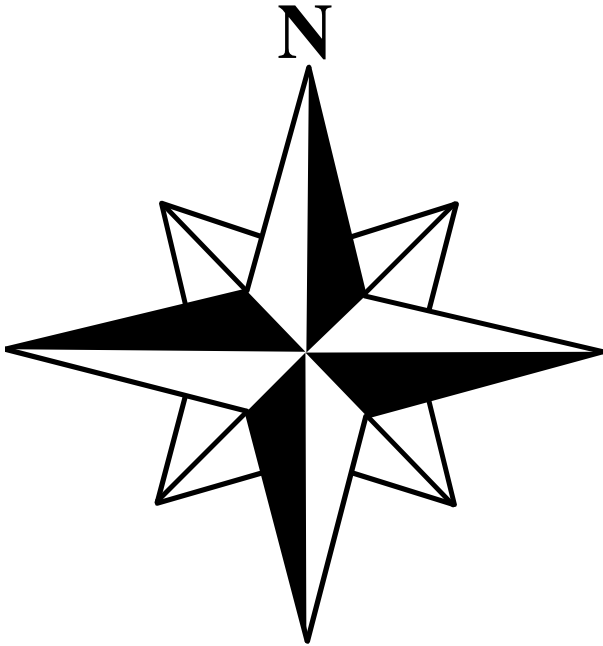
| Start Nr | Pri. Score | Match shot | Ban nr. | tiondel | Divisions | Tid     | Inner tia | X-kord. | Y-kord. | In time | Time since ch | Sweep dir. | Demo | Shoot | Prac- tice | Ins Del | Total kind | Group | Fire kind | Log event | Log type | Time      | Re- lay | Wea- pon | Pos- ition | Target ID | Ext. Nr. |
|----------|------------|------------|---------|---------|-----------|---------|-----------|---------|---------|---------|---------------|------------|------|-------|------------|---------|------------|-------|-----------|-----------|----------|-----------|---------|----------|------------|-----------|----------|
| 201      | 10         | 0          | 1       | 10.4    | 439       | 46:43.7 | 0         | 3.11    | -3.11   | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 1          | 0     | 0         | 3         | 3        | 110440375 | 0       | 0        | 0          | 64        | 0        |
| 202      | 10         | 0          | 2       | 10.2    | 600       | 46:49.8 | 0         | 6       | 0       | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 1          | 0     | 0         | 3         | 3        | 110440984 | 0       | 0        | 0          | 64        | 0        |
| 203      | 10         | 0          | 3       | 10.8    | 120       | 46:55.9 | 1         | 0.85    | 0.85    | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 1          | 0     | 0         | 3         | 3        | 110441593 | 0       | 0        | 0          | 64        | 0        |
| 204      | 10         | 0          | 4       | 10.5    | 359       | 47:02.2 | 0         | 3.6     | 0       | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 1          | 0     | 0         | 3         | 3        | 110442218 | 0       | 0        | 0          | 64        | 0        |
| 205      | 9          | 0          | 5       | 9.9     | 839       | 47:08.3 | 0         | -5.94   | -5.94   | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 1          | 0     | 0         | 3         | 3        | 110442828 | 0       | 0        | 0          | 64        | 0        |
| 201      | 9          | 1          | 1       | 9.9     | 839       | 47:23.8 | 0         | -8.4    | 0       | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 6         | 3        | 110444375 | 0       | 0        | 0          | 64        | 0        |
| 202      | 9          | 1          | 2       | 9.8     | 920       | 47:29.8 | 0         | -6.51   | 6.51    | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 6         | 3        | 110444984 | 0       | 0        | 0          | 64        | 0        |
| 203      | 10         | 1          | 3       | 10.7    | 200       | 47:35.9 | 1         | 1.41    | 1.41    | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 6         | 3        | 110445593 | 0       | 0        | 0          | 64        | 0        |
| 204      | 10         | 1          | 4       | 10.1    | 680       | 47:42.2 | 0         | 4.81    | -4.81   | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 6         | 3        | 110446218 | 0       | 0        | 0          | 64        | 0        |
| 205      | 9          | 1          | 5       | 9.5     | 1159      | 47:48.3 | 0         | 8.2     | -8.2    | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 6         | 3        | 110446828 | 0       | 0        | 0          | 64        | 0        |
| 201      | 9          | 1          | 1       | 9.6     | 1080      | 48:03.8 | 0         | -10.8   | 0       | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 7         | 3        | 110448375 | 0       | 0        | 0          | 64        | 0        |
| 202      | 9          | 1          | 2       | 9.7     | 999       | 48:09.8 | 0         | -7.07   | -7.07   | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 7         | 3        | 110448984 | 0       | 0        | 0          | 64        | 0        |
| 203      | 10         | 1          | 3       | 10.9    | 39        | 48:15.9 | 1         | 0.28    | 0.28    | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 7         | 3        | 110449593 | 0       | 0        | 0          | 64        | 0        |
| 204      | 9          | 1          | 4       | 9.5     | 1159      | 48:22.2 | 0         | 0       | 11.6    | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 7         | 3        | 110450218 | 0       | 0        | 0          | 64        | 0        |
| 205      | 9          | 1          | 5       | 9.8     | 920       | 48:28.3 | 0         | 6.51    | 6.51    | 1       | 655.35        | 0          | 0    | 24    | 0          | 0       | 0          | 1     | 1         | 7         | 3        | 110450828 | 0       | 0        | 0          | 64        | 0        |

| Field             | Format   | Description                                              |
|-------------------|----------|----------------------------------------------------------|
| Start NR          | 9999     | The shooter is identified definitely by his start number |
| Primary score     | 99.99    | Primary score(1.0 through 10.9 or 1 through 10)          |
| Match shot        | 9        | 0=Sighter, 1=Match shot, 8=Final shot                    |
| Firingpoint       | 9999     | Lane number of the shooter(1-9999)                       |
| Secondary score   | 99.99    | Secondary score (1.0 through 10.9)                       |
| Divisions         | 9999     | Number of 100th millimeter to center                     |
| Time              | 23:45:32 | Time mark of the shot(HH:MM:SS)                          |
| Innerten          | 9        | 1=Innerten, 0=no innerten                                |
| X                 | -9999.9  | X Coordinate in millimeters (also negative)              |
| Y                 | -9999.9  | Y Coordinate in millimeters (also negative)              |
| Intime            | 9        | 1=within valid time frame, 0=out                         |
| Time since change | 999.99   | Time since start of the red / green phase, in 0.01s      |

|                   |           |                                                                                           |
|-------------------|-----------|-------------------------------------------------------------------------------------------|
| Time since change | 999.99    | Time since start of the red / green phase, in 0.01s                                       |
| Sweep direction   | 9         | 0=off/left, 1=right, direction for Running target                                         |
| Demonstration     | 9         | Demonstration mode (0=off, 1=on)                                                          |
| Shoot             | 99        | zero based index of the shoot                                                             |
| Practice          | 99        | zero based index of the practice                                                          |
| InsDel            | 99        | Dataset inserted manually=1; Ignore data set=2                                            |
| Totalkind         | 99        | Group total=1, Sub total=2, Grand total=4                                                 |
| Group             | 9         | 0 or 1 based enumeration of the shot group.                                               |
| Firekind          | 9         | Sighter shots=0, Single shots=1, Series shots=2                                           |
| Logevent          | 99999     | Incremental LogEvent number (without Header/Footer)                                       |
| Logtype           | 99        | Shot type (3: OwnShot, 10: CrossShot, 12: IllegalShot)                                    |
| Time              | 999999999 | Time since beginning of the current year in 0.01s units.                                  |
| Relay             | 99        | Current Relay..                                                                           |
| Weapon            | 99        | 0:Weapontype : 1-21:different weapon types                                                |
| Position          | 9         | 0:Position : 1:prone, 2:standing, 3:knieling, 4 prone supported                           |
| TargetID          | 999       | FFFF: undefined, all other numbers according to the Target Ident in the target.ini file." |
| External number   | 999       | External number, with which the user shoot can be identified.                             |



# Error Navigator SA931



## General

**ATTENTION: Plug out the devices before opening them!**

This Instruction for troubleshooting is made to localise system errors independently. The errors/questions are listed in order to circumscribe more and more the error, if you go through them step by step. The troubleshooting is based on the World cup system SA931. Most of these functions apply for other SIUS Ascor systems also.

**To troubleshoot the error the manual is necessary!**

If after circumscribing the error, an exchange of the faulty device (i.e. with second system) makes the system work again, the confirmation of the found error is made. If you request SIUS for further assistance please prepare this document and the made test results.

Remark: For better understanding you can find pictures of the CU931 and LME circuit-boards in section "Software update".

**On malfunctions and false conclusions due to manipulations, on devices and their electronics, which are NOT mentioned hereafter SIUS is not liable.**

## Troubleshooting

| Error                        | Question                                                    | Remedy                                                                                                                           |
|------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| No device shows any reaction | Is the fuse in order                                        | Please exchange the fuse according to manual<br>→ ATTENTION: Check state of devices, eventually send them back to SIUS to repair |
|                              | Is the voltage-switch of the power supply set right         | Set voltage-switch to 110 respectively to 220 VAC                                                                                |
|                              | Is the cabling correct                                      | - Check cabling according to manual<br>- Check that the cables are snapped in correctly                                          |
|                              | LED <sup>1</sup> in device is not blinking (CU931 / Target) | Send device or electronic circuit board back to SIUS to repair                                                                   |

Kommentar [JE1]:

<sup>1</sup> Light-diode (Lamp) on case or on electronic circuit board

| Error                                                    | Question                                                                  | Remedy                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED in CU931 / Target are blinking, but else no reaction | The LED on shooter monitor (M931) does not lit                            | Connect monitor to the mains (220V) and turn it on                                                                                                                                                                                                                                           |
|                                                          | LED on shooter monitor (M931) is blinking                                 | Check data cable connection, exchange monitor (M931) or CU931                                                                                                                                                                                                                                |
|                                                          | Picture on monitor (M931, M1421) appears on power-up and but ceases after | Turn up brightness                                                                                                                                                                                                                                                                           |
|                                                          | Is the brightness set right on monitor                                    | Set brightness                                                                                                                                                                                                                                                                               |
|                                                          | After the download of a new "68000 Software" LED is light (green)         | Check "Hardware Identifier Jumper" on CU931, does it correspond to your software, or download the "68000 Software" again                                                                                                                                                                     |
| System is hanging                                        | Target can not be assigned to CU931                                       | <ul style="list-style-type: none"> <li>- Lock the RJ45 connector in the socket.</li> <li>- Press the ServicePin at least 1 min.</li> <li>- Was the LME already configured (LED flash slowly), it can't configured by a shot once again.</li> </ul>                                           |
|                                                          | SIUSLANE has a red RS232-Status indication, settings ok.?                 | <ul style="list-style-type: none"> <li>- Check the selected COM Port</li> <li>- Check the setting of the jumpers on target circuit boards: "Lamp" for LON and "RS232" for SIUSLANE.</li> </ul> <p>If a jumper was set wrongly the circuit board should be sent back to SIUS for control.</p> |
|                                                          | SIUSLANE has a red RS232-Status indication, cabling ok.?                  | <p>Only for cabling test:<br/>Set one jumper across.</p>  <p>If the connection is ok the status turns to green.</p>                                                                                        |
|                                                          | If the monitor shows "offline"                                            | Delete network configuration and reconfigure according to manual                                                                                                                                                                                                                             |
|                                                          | Is the LON-network set up ideal                                           | <ul style="list-style-type: none"> <li>- Network-ends are set with terminations</li> <li>- Brach lines are not longer than 2m</li> <li>- For special systems (PC, Router etc.) consult the manual</li> </ul>                                                                                 |
|                                                          | CU931 is hanging with the message "Maxload" on the display                | Download "68000 Software". Is the error not fixed send the device back to SIUS                                                                                                                                                                                                               |
|                                                          | The system is booting, makes a reset and boots again                      | <ul style="list-style-type: none"> <li>- Are there only 2/10 systems per corresponding power supply.</li> <li>- The voltage of the power supply is too low (min. 24VDC).</li> </ul>                                                                                                          |

| Error                                              | Question                                                                                               | Remedy                                                                                                                                                              |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PC is hanging                                      | Get the LonDongle disconnected while the PC was running                                                | Send the LonDongle for check to SIUS.<br>→ NEVER change a printerport device while the PC is running (no HotSwap)                                                   |
|                                                    | No communication between PC and LonDongle                                                              | Read "troubleshooting_en.htm" at the directory SIUSData\Help.                                                                                                       |
|                                                    | Was there a new version of SIUSData intalled                                                           | - Rename all *.ini files to *.ini.old and restart SIUSData.<br>- The installation must be run twice. Once for remove the old version, twice to install the new one. |
| The system is booting but operaton is not possible | "Selftest" made without connected printer D931?                                                        | Connect and turn on printer D931 or make a restart                                                                                                                  |
|                                                    | Are settings made on the CU931 which are not reproducible                                              | Make a ColdStart (Reset) on the system.<br>→ ATTENTION: make ColdStart only according to manual.<br>Saved filter will not cleared.                                  |
|                                                    | Was filter set unintentional                                                                           | 1. Switch off filter with "282806" (possible anywhere)<br>2. Set back filter (factory setting)<br>3. Save filter                                                    |
|                                                    | Was unintentional set remote to on                                                                     | Make a ColdStart (Reset) on the system.<br>→ ATTENTION: make ColdStart only according to manual.                                                                    |
|                                                    | Does the monitor show "offline" or does SIUSLANE have a red RS232 status display                       | Check connection between CU931 and target, eventually wrong software in the target electronic.                                                                      |
|                                                    | Discipline choice makes the following question pop up: "All Data Required", but can not been activated | Set FiDa OFF in "IdRq" settings in "OPTIONS" menu                                                                                                                   |

| Error                                      | Question                                                          | Remedy                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The operation does not function correctly. | Are the SelfTest functions executable.(Printer D931 is necessary) | Make all possible SelfTests:<br><ul style="list-style-type: none"> <li>– Printout with key Help</li> <li>– Selected settings (Sett/Prnt)</li> <li>– Shot memory (Log/All and LogH)</li> <li>– Target Test (Trgt)</li> </ul> → ATTENTION If you request SIUS for help please prepare printouts; eventually fax them. |
|                                            | The barcode reader is not working correctly                       | If barcode reader has no red light in front clean the lens or exchange barcode reader: if still not working, send back device an reader to SIUS to repair<br>Was unintentional set remote to on                                                                                                                     |
|                                            | Malfunctions of keyboard                                          | Conduct Selftest (Self) (Printer D931 is necessary)<br>On defect send back device to SIUS to repair                                                                                                                                                                                                                 |
|                                            | On special event's (e.g. select a new target) the system boot     | The memory is overflow with remaning data and will be cleaned.<br>→ If "Automatic Softstart" is ON (default), the system make this under controll by it self.<br>→ Do not change this setting!                                                                                                                      |
|                                            | Malfunctions of the display                                       | Conduct Selftest (Self) (Printer D931 is necessary)<br>On defect send back device to SIUS to repair                                                                                                                                                                                                                 |

| Error                      | Question                                                                      | Remedy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Malfunctions of the system | The printer does not print                                                    | <ul style="list-style-type: none"> <li>- Conduct printer hardware selftest (plug in while pressing LINE FEED and SELECT)</li> <li>If no printout is made send the printer back to SIUS to repair.</li> <li>- Conduct printer software selftest (Self)</li> <li>If there is no printout made contact SIUS.</li> <li>- In the menu "OPTIONS" move the cursor to the complete right "&gt;6" (over the position "Lng").</li> <li>On the display in the upper right corner "ON" or "OFF" appears, press ENTER. Now the "Printer protocol" menu comes up. Set to "ON".</li> </ul> |
|                            | The printer feeds the paper but no printout is made                           | <ul style="list-style-type: none"> <li>Is the printer paper inserted correctly?</li> <li>The shiny side has to be visible.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                            | Printer prints only very weak                                                 | <ul style="list-style-type: none"> <li>Conduct printer hardware selftest (plug in while pressing LINE FEED and SELECT).</li> <li>"Head Rank" letters have to correspond with the letters on the printing unit, otherwise contact SIUS.</li> </ul>                                                                                                                                                                                                                                                                                                                           |
|                            | No paper feed on printer                                                      | <ul style="list-style-type: none"> <li>Paper is jammed in "printer paper cover" or the barrel needs to be cleaned with alcohol</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                            | Direction arrows are print as special characters                              | <ul style="list-style-type: none"> <li>Conduct selftest (Self). The arrows have to be in the character set. If there are no arrows on the printout contact SIUS</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                  |
|                            | Printout of matrix printer is bad                                             | <ul style="list-style-type: none"> <li>The ink ribbon is not inserted correctly or it needs to be changed</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                            | LED on D931 is lit red (ALARM)                                                | <ul style="list-style-type: none"> <li>No paper or release handle is open, otherwise printing unit is defect</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                            | LED on D931 is not lit, but functions well. (ALARM, PRINTER, SELECT)          | <ul style="list-style-type: none"> <li>If the printer has been opened the LED could be covered. Send back printer to SIUS to repair</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                            | On 25m range the light signals are not working                                | <ul style="list-style-type: none"> <li>- Check cabling between TCU25 and VJ45LS</li> <li>- Check if the Lamp/RS232 jumper on each LME/target are on position Lamp</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                |
|                            | Red and green phase are inverted                                              | <ul style="list-style-type: none"> <li>Inverse cabling in VJ45LS</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                            | On the second 25m bay only the TCU25 has a reaction but not the light signals | <ul style="list-style-type: none"> <li>Switch both channels of the TCU25 on INTERN (internal), and the Master on OFF</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                            | The LONDongle is not working correctly                                        | <ul style="list-style-type: none"> <li>- Read the troubleshooting_en.html in the SIUSDATA\Help-directory.</li> <li>- Restart SIUSDATA (Settings in LONDongle are reconfigured)</li> <li>- In LonOrg search for LONDongle and devices.</li> <li>If the LONDongle is not listed contact SIUS</li> </ul>                                                                                                                                                                                                                                                                       |

## Error Navigator SA931

| Error                                  | Question                                                                                                                  | Remedy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|---|----------|--------|---|-----|---|---|--------|---|---|-----|------------|---|------|---|---|------|-------|---|-------|---|---|-------|---------|---|------|---|
| The displayed shot is not correct      | Comment: The discipline is not depending ofn the target type                                                              | It is possible to shoot a 300m big bore rifle discipline on a S10-LON target.<br>The TIC / MIX of the target informs this to the CU931 (see manual)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|                                        | Is the target maintained correctly and the acoustic chamber in order                                                      | - Clean microphones<br>- Mend the acoustic chamber<br>- Replace the backup-masks<br>- Exchange the heavy used front masks and rubber membranes<br>→ see manual                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|                                        | Are the microphones clean                                                                                                 | Remove dust and lead particles with brush                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|                                        | Do the microphones work properly                                                                                          | By knocking the microphones the corresponding LEDs on the target electronic are lit<br>On S10 and S25/50 a automatic paper/rubber feed is made                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|                                        | Display Miss without shotsensor                                                                                           | At target with framhit detector can display falsely a Miss when it be hit by a <u>grazing shot</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|                                        | After a shot “No paper feed” is displayed                                                                                 | - Insert or replace paper/rubber band according to manual.<br>- For S10-LON targets: Close target frame<br>- For S25/50 targets: Check transportation motor.<br>- Check “rubber band feed circuit board” for correct fitting and cleanness                                                                                                                                                                                                                                                                                                                                                                                           |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|                                        | Is the band feed set correctly in SIUSLANE                                                                                | Paper band feed S10:      Air rifle    2cm<br>Air pistol   4cm<br>Rubber band feed S25/50: SB rifle    1mm<br>Pistol      2mm<br>→ ATTENTION: For proper function use band only once                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
|                                        | Is the setup of the target correct?<br>(Printer D931 necessary)                                                           | Make Target Test (Targ) and check temperature and TIC / MIX according manual. If the setup is not correct send back target to SIUS to repair<br><table><tr><td>Nr.</td><td>TIC</td><td>MIX</td></tr><tr><td>0</td><td>LME only</td><td>Normal</td></tr><tr><td>1</td><td>S10</td><td>-</td></tr><tr><td>2</td><td>S25/50</td><td>-</td></tr><tr><td>3</td><td>S25</td><td>Rotated180</td></tr><tr><td>4</td><td>S100</td><td>-</td></tr><tr><td>5</td><td>S300</td><td>Flip0</td></tr><tr><td>6</td><td>DB100</td><td>-</td></tr><tr><td>7</td><td>DB128</td><td>Flip180</td></tr><tr><td>8</td><td>S101</td><td>-</td></tr></table> | Nr. | TIC | MIX | 0 | LME only | Normal | 1 | S10 | - | 2 | S25/50 | - | 3 | S25 | Rotated180 | 4 | S100 | - | 5 | S300 | Flip0 | 6 | DB100 | - | 7 | DB128 | Flip180 | 8 | S101 | - |
|                                        | Nr.                                                                                                                       | TIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | MIX |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 0                                      | LME only                                                                                                                  | Normal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 1                                      | S10                                                                                                                       | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 2                                      | S25/50                                                                                                                    | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 3                                      | S25                                                                                                                       | Rotated180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 4                                      | S100                                                                                                                      | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 5                                      | S300                                                                                                                      | Flip0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 6                                      | DB100                                                                                                                     | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 7                                      | DB128                                                                                                                     | Flip180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| 8                                      | S101                                                                                                                      | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| Are the shots in “Demo-Mode” displayed | If no shots appear re-boot the system.<br>If error is not fixed send back target to SIUS to repair                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |
| Is the shot sensor setting right       | Set shot sensor on/off correctly and check “Hidden Miss” (HMss)<br>OFF → Zero is shown<br>ON → Zero is only marked in log |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |     |     |   |          |        |   |     |   |   |        |   |   |     |            |   |      |   |   |      |       |   |       |   |   |       |         |   |      |   |

| Error                                | Question                                              | Remedy                                                                                                                                                                                                                            |
|--------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The displayed shot is not correct    | Is the position of the shot sensor / weapon right     | Are noise separation walls mounted?<br>→ see manual                                                                                                                                                                               |
|                                      | Are the light sensors of the shot sensor dirty        | Clean the plexiglas window of the light sensors with a humid cloth                                                                                                                                                                |
|                                      | Are the light sensors exposed to direct sun light     | Protect shot sensor from direct sun light                                                                                                                                                                                         |
| Shot indication without a fired shot | Did someone shoot on a neighbour lane                 | - Turn on shot sensor<br>- On systems without shot sensor print out the log (on lane and neighbour lanes). Check the missing shot according to the time marks.                                                                    |
|                                      | 10.9 without a shot on several lanes                  | Print log and compare time marks of the 10.9's of the different lanes.<br>→ If the time is the same: The system is on the same phase (230VAC) as an other consumer: i.e. neon lamp (light on/off), electro-heating or compressor. |
| No shot indication                   | Are shots displayed in demo mode                      | If no shots appear re-boot the system. If error still occurs, send the target back to SIUS to repair                                                                                                                              |
|                                      | SIUSLANE has a red RS232-Status indication            | Are the jumpers in the right direction on RS232, (not across!)                                                                                                                                                                    |
|                                      | Is any device exposed to rain (humidity)              | Are all joints, covers and shutters present and closed                                                                                                                                                                            |
|                                      | Is the measurement bar of a S110, S300 wet after rain | Check rain protection according to manual                                                                                                                                                                                         |

## Available Test Functions

| Test-Function                                     | SA931              | SA921            |
|---------------------------------------------------|--------------------|------------------|
| Printer Test                                      | MAINT./Test/Self   | MAINT./Test/Self |
| Line Test                                         | MAINT./Test/Line   | MAINT./Test/Line |
| Memory Test Monitor                               | Automatic          | Automatic        |
| Target Test                                       | MAINT./Test/Targ   | MAINT./Test/Targ |
| Keyboard and Self Test                            | MAINT./Test/Self   | MAINT./Test/Self |
| Individual Scoreboard Test                        | -                  | Azt              |
| Demo On (Tip on "shot sensor" or press "Ins"-key) | OPT./Demo/ON       | OPT./Demo/ON     |
| Demo Off                                          | OPT./Demo/OFF      | OPT./Demo/OFF    |
| Print protocol                                    | OPT./ 5x">6"/ENTER | -                |
| Monitor status                                    | MAINT./Serv/Stat   | MAINT./Serv/Stat |
| Print log                                         | MAINT./Serv/PrnL   | MAINT./Serv/PrnL |
| Shot Sensor On                                    | OPT./Sens/ON       | OPT./Sens/ON     |
| Shot Sensor Off                                   | OPT./Sens/OFF      | OPT./Sens/OFF    |
| Print "hidden miss" Off                           | OPT./HMss/OFF      | OPT./HMss/OFF    |
| Print "hidden miss" On                            | OPT./HMss/ON       | OPT./HMss/ON     |
| Show "hidden miss" Off                            | OPT./HMss/OFF      | OPT./HMss/OFF    |
| Show "hidden miss" On                             | OPT./HMss/ON       | OPT./HMss/ON     |
| Network Test                                      | MAINT./Test/Net    | -                |
| Configure Network                                 | MAINT./Net         | -                |
| Set time and date                                 | MAINT./Time        | -                |
| Set language                                      | OPT./Lng           | -                |

OPT. ⇒ OPTIONS / MAINT. ⇒ MAINTENANCE (Menu names, reach with "Next Window")

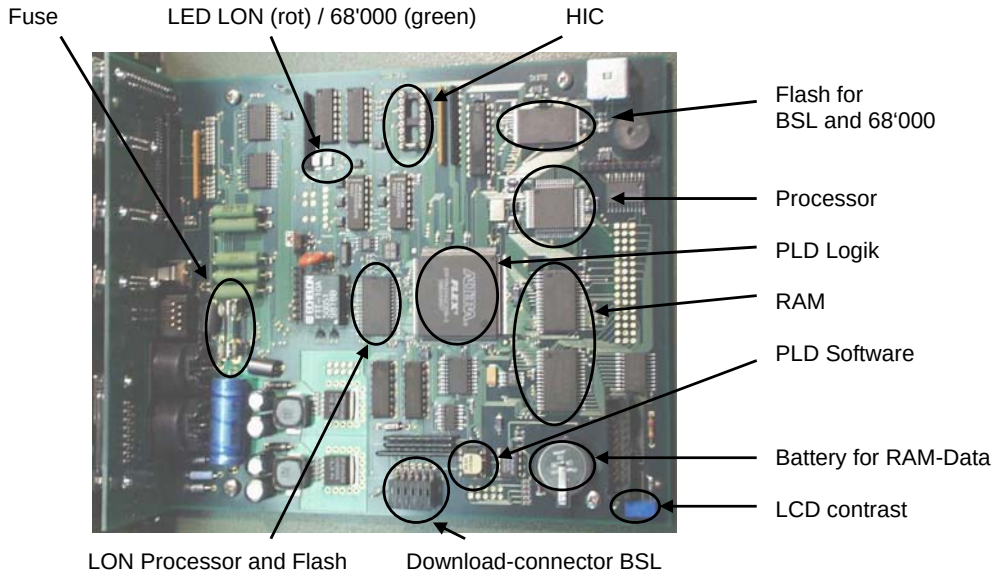
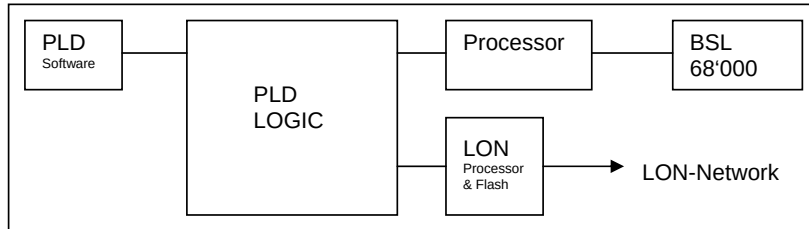
## Software UpDate

The control unit (CU931) has 4 Software components.

1. For the logic (electronic) the PLD (Programmable Logic Device) Software is responsible. This is in direct relation to the circuit board print (Hardware) and can not be inserted into any circuit board version. The software has to be loaded into the PROM (Programmable Read-only Memory) with a programmer. The PROM can not be erased or reprogrammed. The version can be checked on the "Monitor Status" printout or in LONorg.
2. For the communication between the control unit and the target the LON-software is responsible. This communication-software has to be in accordance with the target LON-software! This Software is situated in the LON-chip, a flash (electronically deleteable read-only memory) and can be downloaded with the PC-software called LONorg. The version can be checked on the "Monitor Status" printout or in LONorg.
3. The Boot Strap Loader (BSL) loads or refreshes the monitor software and makes a plausibility check at the boot up. The software is saved in the lowest area of the operating program flash and can be downloaded with a parallel download cable (See appendix) . **If the BSL is exchanged the operating program is deleted!** This implicates that the operating program has to be re-downloaded. The version can be checked on the CU931 display during booting, on the "Monitor Status" printout or in LONorg.

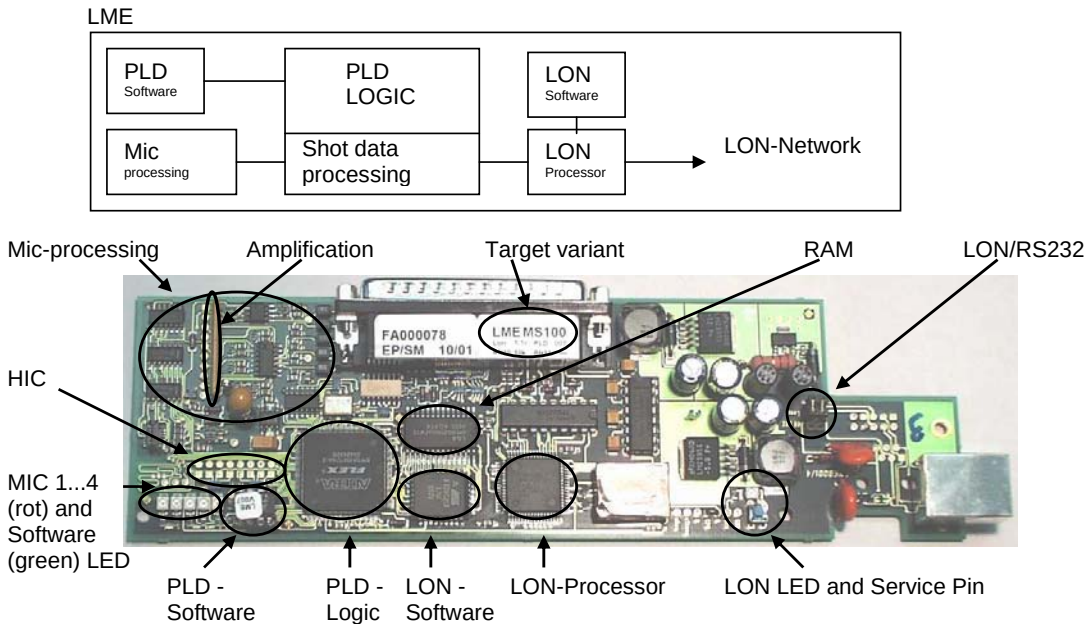
The monitor software (68'000) is in effect the operating program. This software is situated in the upper area of the operating program flash and can be downloaded with the PC-software called LONorg. The version can be checked on the shooters monitor at the end of booting, on the "Monitor Status" printout

CU931



The target electronic (LME) has 2 software components.

1. For the logic (electronic) the PLD (Programmable Logic Device) Software is responsible. This is in direct relation to the circuit board print (Hardware) and can not be inserted into any circuit board version. The software has to be loaded into the PROM (Programmable Read-only Memory) with a programmer. The PROM can not be erased or reprogrammed. The version can be checked on the "Target Test" printout as PIC (PLD Identification Code) or in LONorg.
2. For the communication between target and control unit the LON-Software is responsible. It also receives the shot data and sends it to the control unit. This communication-software has to be in accordance with the control unit LON-software! This Software is situated in a flash (electronically deleteable read-only memory) and can be downloaded with the PC-software called LONorg. The version can be checked on the "Monitor Status" printout or in LONorg.



## Download Software

Software maintenance can be made with the PC-program called LONorg and a LONDongle. The software versions can be checked and newer software can be downloaded.

LONorg is automatically installed if you install SIUSDATA or you can get it as ZIP-file called: "LonOrg\_1\_16.zip".

De-zip it into the root directory of C: and all program and directories are made to run the software.

## Update BSL

The BSL is the same version in all control units and **does not need to be updated normally**. If in some cases the BSL has to be updated, it can be done with the "Downloader"  in LONorg, over the parallel

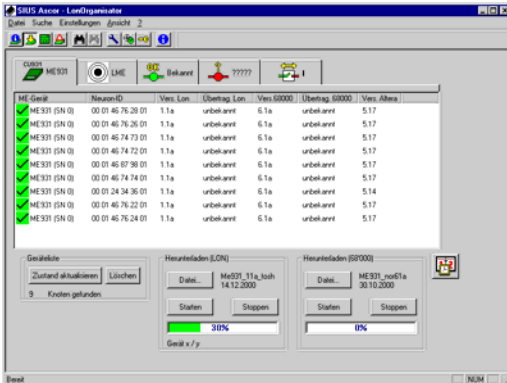
download cable (see annex). To be able to use the "Downloader" in LONorg the activation code  has to be inserted.

**ATTENTION: If the BSL is updated the operating software is deleted and has to be re-downloaded!**

**ATTENTION: Due to a wrong handling the repair of all devices might become necessary!**

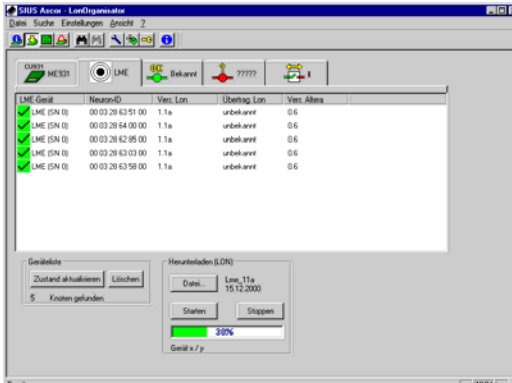
1. Connect the SA931 system with LONdongo to a PC
2. Copy the CU931 update-file into the directory:  
C:\Program Files\Siuser\SiuserData\LonOrg\Download\ME 68000.
3. Copy the LME (target) update-file into the directory:  
C:\Program Files\Siuser\SiuserData\LonOrg\Download\LME
4. Start the LONorg software  in the directory C:\Program Files\Siuser\SiuserData\LonOrg\
5. The LONorg main screen appears with the registers: "CU931", "LME", "Known", "Unknown" and "Router".
6. If the main screen does not appear click on  to activate it.
7. Search for all devices in the LON-network with .
8. The screen should display the following for CU931 or LME (targets):

Register CU931



| ME Gerät       | Hersteller        | Vers. Lon | Übertrag. Lon | Vers. 68000 | Übertrag. 68000 | Vers. Altera |
|----------------|-------------------|-----------|---------------|-------------|-----------------|--------------|
| ✓ ME301 (SN 0) | 00:01:46:76:26:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |
| ✓ ME301 (SN 0) | 00:01:46:76:26:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |
| ✓ ME301 (SN 0) | 00:01:46:74:73:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |
| ✓ ME301 (SN 0) | 00:01:46:74:72:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |
| ✓ ME301 (SN 0) | 00:01:46:87:98:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |
| ✓ ME301 (SN 0) | 00:01:46:74:74:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |
| ✓ ME301 (SN 0) | 00:01:24:34:36:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.14         |
| ✓ ME301 (SN 0) | 00:01:46:76:22:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |
| ✓ ME301 (SN 0) | 00:01:46:76:24:01 | 1.1a      | unbekannt     | 6.1a        | unbekannt       | 5.17         |

Register LME (targets)

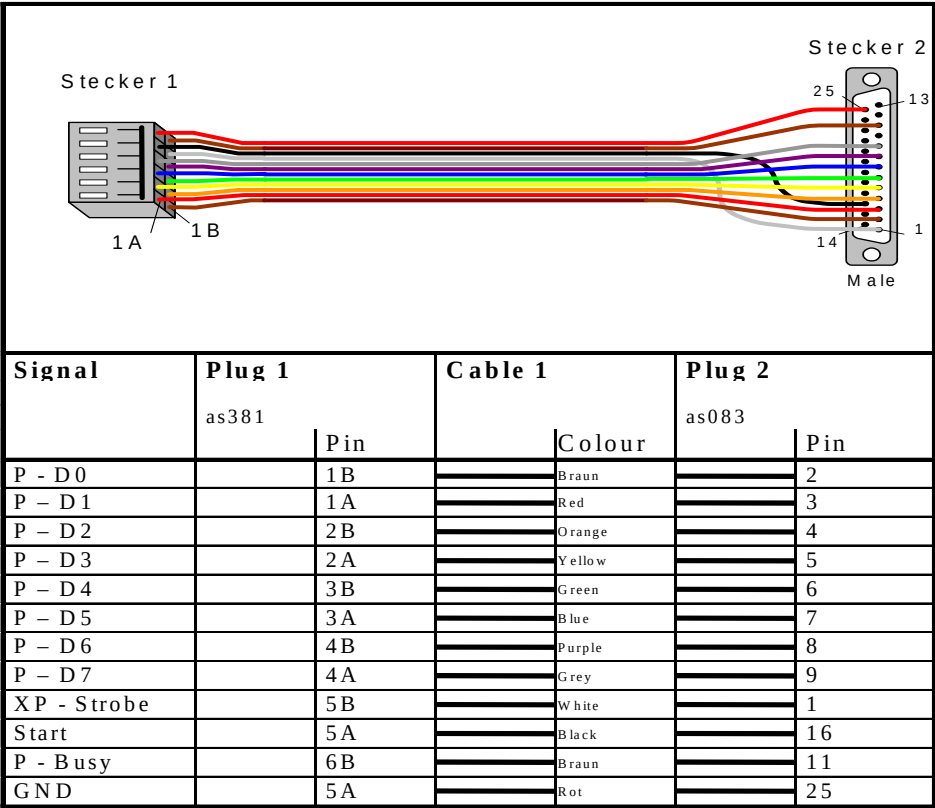


| LME Gerät    | Hersteller        | Vers. Lon | Übertrag. Lon | Vers. Altera |
|--------------|-------------------|-----------|---------------|--------------|
| ✓ LME (SN 0) | 00:03:28:63:51:00 | 1.1a      | unbekannt     | 0.6          |
| ✓ LME (SN 0) | 00:03:28:64:00:00 | 1.1a      | unbekannt     | 0.6          |
| ✓ LME (SN 0) | 00:03:28:62:05:00 | 1.1a      | unbekannt     | 0.6          |
| ✓ LME (SN 0) | 00:03:28:63:03:00 | 1.1a      | unbekannt     | 0.6          |
| ✓ LME (SN 0) | 00:03:28:63:58:00 | 1.1a      | unbekannt     | 0.6          |

If the system was configured according to the manual, the x in "(SN x)" is the lane number

9. Now all CU931 or LME (targets) can be marked; With the button "Refresh", the versions of the connected devices is shown. With "File" button the new software of point 2. or 3. Can be selected. With "Start" button the corresponding software is downloaded to the selected devices.  
**ATTENTION:** The LON-software is downloaded to the selected devices only, the 68'000-software (monitor-/operating software) is downloaded to ALL connected CU931!
10. Press "Refresh" button to check the downloaded version of all devices.  
 ☒ LON-version not updated (very rarely): Select devices and download again.  
 ☒ 68'000-version not updated: Disconnect all devices which had a successful download from the LON-network and download again.
11. With this button  the language of LONorg can be changed. The selected language is activated at the next program start.
12. Clicking on  for detailed information (help file).  
For further inquiries contact: SIUS AG, Im Langhag 1, CH-8307 Effretikon  
Tel.: +41 52 354 60 60, Fax: +41 52 354 60 66, [www.sius.com](http://www.sius.com)

# Annex



BSL Parallel download cable



## PROGRAMVARA

Datum: 2012-11-19

Bifogade CD innehåller programvaran för Er PC vid skjutledaren.

Vänligen installera direkt under C:\Sius Ascor\.....